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ABSTRACT

Papers from the meetings of the Rural Sociology Section of the Association of Southern Agricultural Workers held in Atlanta, Georgia (February 1973) are presented in this volume. Papers are arranged in the order in which they were given. Major topics include demography, human resources, youth, family, community and community development, rural development, environmental issues, social change, and social stratification. Registrants are listed, as are the principal professional personnel involved in the S-44 Adjustment study, the S-61 Mobility study, and the S-79 Institutional Impact study. Officers of the Rural Sociology Section of the Association of Southern Agricultural Workers, officers of the Southern Rural Sociology Research Committee, and State Representatives are also listed. (PS)

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RURAL SOCIOLOGY SECTION

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PROCEEDINGS

Rural Sociology Section

Association of Southern Agricultural Workers

1973

Annual Meeting, Atlanta, Georgia
February 5-7, 1973

Virlyn A. Boyd, Clemson University
Secretary - Program Chairman

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FOREWORD

Copies of papers presented in the meetings of the Rural Sociology Section of the Association of Southern Agricultural Workers held in Atlanta, Georgia, February 5-7, 1973, are included in this volume. Papers are arranged in the order in which they were presented. Abstracts of these papers are published in the official Proceedings of the Association.

The officers of the Rural Sociology Section wish to express their appreciation to the many sociologists who participated in this year's meeting by preparing and presenting papers, chairing sessions, and serving on panels. This volume was made possible by each author furnishing copies of his paper. Anyone desiring additional copies or having questions about a paper is requested to communicate directly with the author. A list of registrants follows this Foreword.

Special appreciation is extended to the Department of Agricultural Economics and Rural Sociology, South Carolina Agricultural Experiment Station, Clemson University for compiling, binding, and distributing the Proceedings.

Virlyn A. Boyd, Secretary and Program Chairman
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Association of Southern Agricultural Workers

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Available Separately as ED 071802

A Profile of Selected Demographic and Socioeconomic Characteristics of Rural Georgia Counties

Hanns G. Pieper and H. Max Miller
The University of Georgia

Introduction: The past decade witnessed a considerable redistribution of the Georgia population. The population of the state increased 16.4 percent during the decade; however, during this period the population of the urban areas increased 27 percent and the urban fringe increased by 102 percent. At the same time the population of the rural areas of the state increased only 3.3 percent, considerably less than what could have been expected on the basis of birth and death rates alone. As is illustrated in Table 1., these population trends are not peculiar to Georgia alone, but are instead a nationwide phenomenon.

Table 1. Percent Population Change, 1960 to 1970: U.S. and Selected Southern States.

State	Percent Change			
	State	Urban	Urban Fringe	Rural
Alabama	5.4	12.3	29.0	-2.9
Florida	37.1	49.3	55.8	2.4
Kentucky	5.9	24.4	46.9	-8.9
Louisiana	11.8	16.8	56.9	3.2
Maryland	26.5	33.3	59.0	8.5
Mississippi	1.8	20.2	2429.3	-9.4
North Carolina	11.5	26.8	434.7	1.5
South Carolina	8.7	25.6	75.1	-3.1
Tennessee	10.0	23.6	-60.0	-4.9
U.S.	13.3	19.9	44.0	-0.3

Source: U.S. Census of Population: 1970, General Population Characteristics, Selected State Reports.

This population movement has caused substantial changes in the demographic and socioeconomic structures of the various regions involved. It is the aim of this paper to examine the changes which have occurred in the rural open-country areas. The rural open-country population has been specified to distinguish between those persons designated rural in the traditional sense and those persons who are actually urban in their characteristics but are classified as rural by virtue of their residence; for example, the urban white collar worker who resides in a home in the rural areas adjacent to towns and cities.

Throughout the paper the rural rates for the various characteristics have been compared with the state rates to provide an additional perspective.

Sample: The county was chosen as the basic unit of analysis primarily because of the accessibility of desired data at the county level. The total rural population was undesirable as the unit of analysis because this group would have contained many "rural" persons who could not be considered open-country rural. The rural farm population was rejected as the unit of analysis because this group constitutes only a small proportion of the population which could be considered rural open-country.

The decision as to which of the 159 Georgia counties to include in the sample was based on the criteria of urban-rural composition and the population density of each county. Fifty counties were included in the final sample.[1] None of these had any urban population either in 1960 or 1970, and the average density of the counties was far below the population density of Georgia as a whole. While the average density of the sample counties was 24.9 persons per square mile, the population density of Georgia in 1970 was 79 persons per square mile and the density of the urban counties averaged 538 persons per square mile. In addition to being acceptable with regard to urban-rural distribution and density, the fifty counties are also well distributed throughout the state and every State Economic Area is represented.

Changes in Population Size

During the previous decade the population of the sample increased from 347,787 to 361,180, representing a 3.9 percent increase over the ten year period.[2] Based on birth and death statistics alone a population increase of 12 percent would have been expected in these counties. However, a heavy net outmigration of 28,650 persons cut heavily into the population. A nonwhite net outmigration of 34,765 persons was somewhat offset by a white net inmigration of 6,115 persons.

The white population of the area increased by 11.3 percent while the nonwhite population declined by 12.3 percent. A separate analysis was run on those counties in the sample which were located in the more isolated areas of the state and it was found that these counties showed a net outmigration for both whites and nonwhites. However, all of the counties in the sample with an enumerated nonwhite population had some nonwhite net outmigration.

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[1] The fifty counties included in the sample were Atkinson, Baker, Banks, Brantley, Bryan, Calhoun, Charlton, Clay, Crawford, Dade, Dawson, Dooley, Echols, Effingham, Fannin, Fayette, Forsyth, Franklin, Gilmer, Glascock, Hancock, Heard, Jasper, Johnson, Lee, Lincoln, Long, McIntosh, Madison, Marion, Miller, Oconee, Oglethorpe, Paulding, Pickens, Pike, Quitman, Rabun, Schley, Stewart, Taliaferro, Taylor, Towns, Twiggs, Union, Warren, Webster, Wheeler, White and Wilcox.

[2] The sources of data for this section were the U.S. Census of Population: 1960, General Population Characteristics, Georgia and U.S. Census of Population: 1970, General Population Characteristics, Georgia.

The number of families living in the sample counties increased 12.0 percent over the decade, from 80,971 to 90,653 families. During the same period the number of husband and wife families increased by only 11.8 percent, indicating a greater percentage of broken homes in 1970. In 1960, 85.2 percent of the families were husband and wife families, while in 1970, 85.0 percent of the families fell into this category. While this difference in itself is insignificant, further analysis might be useful to determine if this a trend and if so the findings might be of value to the various social agencies in these areas. It is interesting to note that the more isolated counties showed a greater decline in the percent of husband and wife families than did the other counties in the sample. In the isolated counties the percent of husband and wife families declined from 83.0 percent of all families in 1960 to only 81.7 percent in 1970.

Changes in Age Composition

The age structure of the sample population changed considerably during the decade, resulting in a somewhat older population in 1970. During the decade the median age of the population increased by 2.3 years from 24.5 to 26.8. During the same period the median age of the Georgia population as a whole remained stable at 25.9.

As expected, there were some differentials by race and sex. The white rural population had a higher median age than its nonwhite counterpart in 1970 but only aged one year from 28.7 to 29.7 during the decade. The white population of Georgia aged only 0.3 years during the decade. The median age of the white Georgia population increased from 27.5 to 27.8.

The nonwhite rural population aged 1.4 years during the decade, with the median age increasing from 17.8 to 19.2. The nonwhite population of the state, However, became younger during the decade, with a decline in median age from 21.6 to 20.9.

The rural open-country female population had a higher median age both in 1960 and in 1970 (26.5 and 28.0) than its male counterpart (23.2 and 25.5). However, the male population tended to age a little more during the decade. For Georgia as a whole, both male and female populations had lower median ages than those of the sample. Both median ages were also quite stable over the decade; thus any differences which existed between the state and the sample in 1960 became larger during the decade. For Georgia the median age of the male population was 24.6 in both 1960 and 1970, and for females the median age dropped from 27.3 to 27.2 during the decade.

Much of the aging of the sample population was due to a simultaneous decline of persons under 14 and an increase in persons over 55. The number of persons aged 14 or under declined by 9.8 percent, with the largest decline being in the 0-5 age group (18 percent). For Georgia the population aged 0-14 increased 3.7 percent but the 0-5 group declined 10.6 percent.

Table 2. Age and Sex Composition in Percent, 1960 and 1970: Total Sample.

	1960		1970	
Age Group	Males	Females	Males	Females
0-4	12.0	11.4	9.7	8.8
5-9	12.2	11.5	10.8	10.1
10-14	12.3	11.6	11.6	10.6
15-19	9.9	9.2	10.3	9.6
20-24	5.6	5.6	6.9	7.2
25-29	5.0	5.3	6.3	6.1
30-34	5.2	5.5	5.3	5.4
35-39	5.3	5.7	5.0	5.1
40-44	5.7	5.8	5.2	5.2
45-49	5.6	5.6	5.1	5.3
50-54	5.1	5.0	5.2	5.3
55-59	4.3	4.5	4.9	5.1
60-64	3.4	3.7	4.5	4.6
65-69	3.2	3.7	3.5	4.0
70-74	2.4	2.7	2.5	3.0
75+	2.8	3.4	3.1	4.4

Source: U.S. Census of Population: 1960, General Population Characteristics, Georgia. U.S. Census of Population: 1970, General Population Characteristics, Georgia.

Table 3. Age and Sex Composition in Percent, 1960 and 1970: White Sample Population.

	1960		1970	
Age Group	Males	Females	Males	Females
0-4	10.2	9.7	8.7	8.0
5-9	10.7	10.1	9.8	9.1
10-14	11.4	10.8	10.4	9.4
15-19	9.4	8.8	9.3	8.7
20-24	5.5	5.5	7.0	7.4
25-29	5.3	5.6	6.8	6.5
30-34	5.7	5.8	5.8	5.8
35-39	5.9	6.1	5.5	5.5
40-44	6.2	6.3	5.7	5.5
45-49	6.2	6.1	5.6	5.6
50-54	5.6	5.5	5.6	5.7
55-59	4.7	5.0	5.3	5.5
60-64	3.9	4.2	4.9	5.0
65-69	3.5	3.9	3.7	4.2
70-74	2.7	3.0	2.7	3.3
75+	3.1	3.8	3.3	4.8

Source: U.S. Census of Population: 1960, General Population Characteristics, Georgia.U.S. Census of Population: 1970, General Population Characteristics, Georgia.

For Georgia the proportion of persons aged 55 and over increased from 14.7 percent of the population in 1960 to 16.3 percent ten years later, while for the sample the proportion of persons in this age category increased from 17.2 percent to 19.9 percent over the decade. The sample population aged 55 and over increased by 20.1 percent over the decade, with an increase of 26.0 percent in the 55-64 age group. At the state level the number of persons aged 55 and over increased by a slightly higher percentage.

Largely because of the decrease in the number of persons aged 14 or under, the total dependency ratio for the sample population declined from 101.8 in 1960 to 89.0 in 1970. The youth dependency ratio dropped from 92.4 to 90.9 while the aged dependency ratio increased from 18.7 to 19.5 over the decade.

The trends concerning dependency ratios for the state were very similar to those of the rural sample. However, the state ratios were generally lower than the rural ratios, indicating a lower percentage of persons at the dependent ages for the state. The total state dependency ratio dropped from 86.0 to 78.1 during the decade. The aged dependency ratio increased slightly from 13.7 to 14.3, while the youth dependency ratio declined from 72.3 to 63.8.

The dependency ratios varied considerably by race, with the white population having considerably lower dependency ratios in both the rural sample and for the state as a whole. The difference in dependency ratios was of course largest between the state white population and

Table 4. Age and Sex Composition in Percent, 1960 and 1970: Nonwhite Sample Population.

	1960		1970	
Age Group	Males	Females	Males	Females
0-4	16.0	14.9	12.3	11.0
5-9	15.7	14.5	14.0	12.9
10-14	14.3	13.3	15.2	13.8
15-19	10.8	10.1	13.0	11.9
20-24	5.9	5.8	6.9	6.9
25-29	4.2	4.7	4.8	5.0
30-34	4.1	4.7	4.0	4.5
35-39	4.2	4.9	3.6	4.1
40-44	4.4	4.8	3.8	4.5
45-49	4.4	4.7	3.8	4.4
50-54	3.8	4.0	4.1	4.3
55-59	3.2	3.4	3.9	4.1
60-64	2.4	2.6	3.4	3.6
65-69	2.5	3.1	2.9	3.4
70-74	1.8	2.1	1.9	2.2
75+	2.2	2.5	2.5	3.4

Source: U.S. Census of Population: 1960, General Population Characteristics, Georgia. U.S. Census of Population: 1970, General Population Characteristics, Georgia.

the rural sample nonwhite population. Table 5 lists the dependency ratios for all groups and both racial categories. It is interesting to note that there was only a small difference in the aged dependency ratios for whites and nonwhites in each area. For the rural sample the aged dependency ratio was not only higher for the white group, but increased during the decade while the aged dependency ratio decreased over the same period for the nonwhite population. This could be an indication that some older nonwhites are also migrating out of the rural areas.

Table 5. Dependency Ratios by Racial Group and Location, 1960 and 1970.

	Rural Sample		Georgia	
Category	1960	1970	1960	1970
Total	101.8	89.0	86.0	78.1
Total Youth	83.1	69.5	72.3	63.8
Total Aged	18.7	19.5	13.7	14.3
Nonwhite Total	139.5	123.3	109.4	102.3
Nonwhite Youth	120.9	105.0	95.4	87.2
Nonwhite Aged	18.6	18.3	14.0	15.1
White Total	88.2	78.9	78.1	70.8
White Youth	69.4	59.1	64.5	56.8
White Aged	18.8	19.8	13.6	14.0

Source: U.S. Census of Population: 1960, General Population Characteristics, Georgia. U.S. Census of Population: 1970, General Population Characteristics, Georgia.

Changes in Sex Composition

The sex ratios for the sample population were higher than those of Georgia but both groups of ratios fell during the decade. The sex ratio for the sample counties fell from 97.0 in 1960 to 95.0 in 1970. Utilizing estimated sex ratios for births, deaths and migration for the decade it was discerned that the major component of the decrease in the sex ratio was the sex differential in deaths. Migration had a very small effect on the change indicating that the sex differential in net migration for the area was low. For the white population the sex ratio fell from 98.3 to 96.1 while for the nonwhite population of the sample the sex ratio fell from 94.1 to 92.1 during the decade.

The sex ratio for Georgia as a whole did not drop by as much as that of the rural sample; however, it also declined from 95.5 to 94.6. For the white population of the state the sex ratio declined from 97.6 to 96.6, while for the nonwhite population the sex ratio declined from 90.3 to 88.9.

Changes in Fertility

The number of infants born in the rural sample during the decade declined from 7,945 to 6,846, while for the state the number of infants born declined from 99,707 in 1960 to 95,584 in 1970. The fertility ratios during the same period fell from 538 to 409 for the rural sample and from 524 to 421 for the state as a whole. This would indicate that fertility is declining at a slightly more rapid rate in the open-country areas than for Georgia as a whole.

Table 6. Number of Births, by Race, 1960 and 1970.

	Rural Sample		State	
Group	1960	1970	1960	1970
Total Population	7,945	6,846	99,707	95,584
White Population	4,541	4,606	64,419	65,763
Nonwhite Population	3,404	2,240	35,288	29,821

Source: Georgia Vital and Morbidity Statistics, 1960. Georgia Vital and Morbidity Statistics, 1970.

The general fertility rate delineated by race affords a more detailed examination of fertility differentials. For both racial groups taken together, the fertility rates and the decline over the decade were quite similar for the rural areas and for the state. In 1960 the fertility rate for the sample counties was 121.4, while for the state the rate was 121.2. In 1970 the state fertility rate was 95.3, while the rate for the sample was 95.6. There were, however, variations by race.

The rural white population had lower fertility rates than the white population of the state in both 1960 and 1970. In 1960, the rural white population had a fertility rate of 99.5 as compared with 107.9 for the state white population. In 1970 the rural whites had a fertility rate of 86.8 as compared with 88.2 for their state counterparts. While the rates for both regions dropped during the decade the absolute number of white births increased in both areas.

The nonwhite fertility trends were not at all like those of the white population. The number of births in the nonwhite population declined in both the sample and at the state level. The statewide nonwhite fertility rate was also higher than the fertility rate of the nonwhite sample population. In general, the nonwhite fertility rates were considerably higher than the white fertility rates, although they declined more quickly during the decade. For the sample population the nonwhite fertility rate dropped from 171.8 to 121.0 over the decade, while for Georgia the nonwhite rate fell from 156.6 to 115.8.

Thus it appears that regardless of race or location, the fertility levels seem to be falling. However, it is difficult to discern from these data whether this drop is due to a situation where the individual mother is having less children or whether a lower proportion of women in the 15-44 age group are married and thus in that group associated with childbearing.

SOCIOECONOMIC CHARACTERISTICS

Income and Wealth

Several trends concerned with changes in income during the past decade are apparent from the data. The median incomes for both the rural families and the families at the state level showed considerable increases over the decade. The nonwhite median family income exhibited a greater rate of increase than the white median family income in both locations but still remained considerably below the white family income.

During the ten year period from 1959 to 1969 the median family income for all families in the rural sample increased by 129.4 percent from $2,661 to $6,105 per year.[3] For Georgia the median family income increased 94.1 percent from $4,208 in 1959 to $8,167 in 1969. White median family income for the rural sample increased from $3,258 to $6,886, or an increase of 111.4 percent. At the state level white income increased 82.6 percent, or an increase from $5,027 to $9,179. For nonwhite families of the rural sample median income increased from $1,537 to $3,541 during the decade for an increase of 130.4 percent and for the state the median nonwhite family income increased by 117.3 percent from $2,188 to $4,755. In general the median family incomes for all families, white families and nonwhite families were about a third higher for the state as a whole than for their rural counterparts.

Almost 26 percent of the white rural families had incomes of over $10,000 per year while only 6.4 percent of the nonwhite families had incomes at this level in 1969. For Georgia 44.3 percent of the white families had incomes of more than $10,000 in 1969 while only 14.2 percent of the nonwhite families had incomes at that level.

Income is not the only indicator of wealth for a given population and the Census Bureau also collects data on several other factors associated with economic progress. A few of these factors were also examined for both the state and the rural sample. Much of the data presented in this section is based on samples rather than on complete enumeration.

The percent of households with telephone service increased in both the sample and for the state as a whole. In the rural open-country sample the number of households with telephones increased from 41.8 percent to 67.1 percent. The percentages were considerably higher for the state, where the percent of households with telephones increased from 61.8 percent to 80.0 percent. Another consumer item associated with communication also became more readily available in both the sample area and at the state level. In the rural areas of the sample in 1960, 29.1 percent of the households had no automobile available. By 1970 this percentage had declined to 18.7 percent. The decline was not quite so great for the state as a whole, where the percentage of households without automobiles declined from 25.8 percent to 17.1 percent. The percent of families with more than one car increased by almost the same degree in both areas. In the rural areas the percentage increased from 18.0 to 34.2 percent while for the state the percent increased from 22.3 percent to 39.6 percent.

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[3] Sources of data presented in section were: U.S. Census, 1960, General Social and Economic Characteristics, Georgia. U.S. Census, 1970, General Social and Economic Characteristics, Georgia.

Appliances are often used as another indicator of prosperity. Interestingly, more washers were found among the population of the rural sample than among the statewide population. In 1970 only 26.1 percent of the rural households did not have a washer as compared with 29.7 percent of the households at the state level. The percent of households without washers also declined more rapidly in the open country rural areas. Eight percent more rural households had washers in 1970 than in 1960 while the percentage increase for the state was only 5.3 percent. The percent of households with dryers however, was higher for the state as a whole, as was the rate of increase in dryer ownership during the decade. The percent of homes with dryers in the rural areas increased from 3.0 percent to 25.3 percent during the decade, while the state increased from 6.4 percent to 33.8 percent.

More food freezers were found in the rural areas where 49 percent of the homes had freezers as compared with 35.2 percent for the state as a whole. The percentage of homes with freezers also increased at a greater rate in the rural areas. More households had televisions at the state level than in the rural areas both in 1960 and in 1970, although the rate of increase in the rural areas was greater. In the rural areas the percent of homes with no television declined from 31.9 percent in 1960 to 8.1 percent in 1970. For Georgia the percent of households with no television declined from 20.0 percent to 5.2 percent.

Educational Characteristics

The level of education attained increased in both areas, although from the data it appears that the level of education increased at a more rapid rate at the state level. In the rural sample the percent of persons aged 25 and over with a high school education increased from 18.8 percent in 1960 to 24.1 percent in 1970, while for the state this group increased from 32.0 percent to 40.6 percent over the period. Thus there was a 40.8 percent increase in the number of high school graduates in the rural areas, while for the state there was a 48.5 percent increase. One possible explanation for the difference in the rate of increase between the two areas is that many of the migrants leaving the rural areas are probably the higher education, under 25 group, leaving behind those who dropped out of school for various reasons. The number of pupils in average daily attendance also increased in both areas, but while the number of pupils increased by 25.5 percent at the state level, the number of pupils in average daily attendance increased by only 3.6 percent in the rural areas. Given the present population structure and demographic trends, it would appear that the enrollment in the rural areas will continue to increase at a much slower rate than the increases at the state le vel and may possibly decrease or stabilize toward the end of the decade. This trend is of concern in providing adequate facilities for those students remaining in the rural areas.

Employment Characteristics

The civilian labor force in both areas increased during the decade and unemployment rates were lower in 1970 than in 1960 in both the rural sample and for the state. In the rural sample unemployment declined from 4.8 percent in 1960 to 3.0 percent in 1970, while for the same period statewide unemployment declined from 4.5 percent to 3.2 percent. One explanation of the lower rural unemployment rate is the outmigration from these areas, particularly of the young nonwhite population. These individuals could normally be expected to have fairly high unemployment rates, and in fact while the labor force for the state rose by 25.7 percent during the decade the labor force of the sample increased only 14.1 percent.

There were substantial changes in the occupational structure of the sample, although the distribution of the work force at the state level remained relatively stable over the decade. The major cause of change in the distribution of both groups was the change in the number of persons employed in agriculture related industries. The impact of the change was so much greater in the rural sample simply because a much larger proportion of the rural work force fell into this category in 1960 than was the case for the state-wide work force.

Table 7. Percent of Persons Employed by Occupation, 1960 and 1970: Sample and State.

	Sample		State	
Industry	1960	1970	1960	1970
Agriculture and Forestry	22.3	10.8	9.1	4.1
Construction	6.9	8.6	6.2	6.4
Manufacturing	28.3	34.1	26.3	25.5
Transportation and Communication	3.5	4.9	6.3	6.6
Wholesale-Retail	13.4	14.4	17.7	18.3
Services	17.1	19.0	22.1	30.0
Public Administration	4.1	4.5	5.3	5.5
Other	4.4	3.7	7.0	3.6

Source: Georgia Statistical Abstract, 1970. Georgia Statistical Abstract, 1972.

The major employer in both areas in 1960 was manufacturing, which occupied 28.3 percent of the rural work force and 26.3 percent of the state work force. During the decade the percentage of persons employed in manufacturing increased to 34.1 percent in the rural areas while decreasing slightly to 25.5 percent at the state level. Agriculture, which was the second largest employer in 1960 in the rural sample (22.3 percent of the work force), was the fourth largest employer in the state (9.1 percent of the state work force). By 1970, agriculture had dropped to the 4th largest employer in the rural sample and the 7th largest employer in the state. In the rural sample all of the occupational categories benefited somewhat from the decline in agriculture; however, manufacturing increased its share of the work force by the greatest degree. For Georgia, both agriculture and manufacturing lost some percentage of their labor force. Service occupations increased by the largest proportions in the state.

Since agriculture and manufacturing were major sources of employment in the rural sample in 1960 it was thought desirable to examine these two occupations in greater detail. In 1959 the sample counties contained 24,856 farms, of which 80.2 percent were white operated.[4] By 1969 the number of farms had declined by 38.2 percent to 15,371 farms of which 92.1 percent were white operated. The number of farms with less than 69 acres decreased by 47.4 percent, a rate of decrease considerably higher than the total decrease in farms over the period. Hence it would appear that during the decade many small farmers left agriculture and that this was particularly true of nonwhite farmers with small land holdings.

Full-owner farms, as expected, decreased by the smallest amount (22.6 percent) during the decade, and comprised a larger proportion of the total number of farms in 1969 than they did in 1959. In 1959 they constituted 60.0 percent of the farms; in 1969 they constituted 75.1 percent. White full-owner farms decreased by only 19.8 percent while nonwhite full-owner farms decreased by 49.1 percent.

Part-owner farms declined by 30.3 percent over the decade. In 1959 they comprised 15.8 percent of all farms, while in 1969 they comprised 17.7 percent. White operated part-owner farms declined by 38.1 percent while nonwhite operated part-owner farms declined by 50.5 percent.

Tenant farms declined by the greatest amount during the decade, 81.7 percent. In 1959, 24.3 percent of the farms were tenant farms; by 1969 this percentage had dropped to 7.2 percent. The number of white operated tenant farms declined by 71.8 percent while the number of nonwhite tenant farms declined by 91.6 percent.

It has already been stated that manufacturing was the sample's single largest employer in both 1960 and 1970. Thirty four percent of the persons employed in the sample counties in 1970 were employed in manufacturing related occupations In 1967 there were 844 manufacturing plants in the sample counties, of which 124, or 14.7 percent, employed twenty or more persons. In the state there were 6,976 manufacturing establishments of which 32.5 percent employed twenty or more persons. The average yearly income per worker in the rural manufacturing plants was $3,453 while for the state the average yearly income of persons employed in manufacturing was $5,273. Thus, while a greater proportion of the rural labor force is employed in manufacturing it would appear that rural manufacturing plants are both smaller and tend to pay less than manufacturing in the state as a whole.

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[4] Sources for data on agriculture were: 1964 Census of Agriculture, Part 28, Georgia. 1969 Census of Agriculture, Part 28, Georgia.

Housing Characteristics

During the decade the total number of housing units available increased 14.3 percent in the sample counties and 25.4 percent in the state.[5] During the same period, occupied housing increased 17.4 percent in the sample counties and 27.9 percent in the state. This indicates that for both areas housing was increasingly in demand and that many previously vacant homes were utilized during the decade. In the sample counties 88.6 percent of the available housing units were occupied in 1970 while for the state 93.4 percent of the housing units were occupied. It is interesting to note that occupied housing increased considerably faster than did the number of new families, indicating that a sizable proportion of the new occupied housing units were occupied by nonfamily type groups or single persons.

Housing, in general, became less crowded during the decade, although there was still a greater degree of crowding in the rural sample than in the state as a whole. For the sample counties, the percentage of housing units with more than 1.01 persons per room declined from 23.6 percent to 14.5 percent. For the state the number of housing units in this category declined from 18.4 percent to 10.7 percent.

The percent of total occupied housing units which were owner-occupied increased 38.7 percent in the sample counties and by a slightly higher percentage, 39.0 percent, in the state. However, more of the occupied units in the sample counties were owner-occupied than in the state as a whole. For the rural sample, the percent of owner-occupied units increased from 58.8 percent in 1960 to 69.5 percent in 1970, while for the state the percent of owner-occupied units increased from 56.2 percent to 61.1 percent.

The white population of both the sample and the state tended to have much higher percentages of home ownership than the nonwhite population. However, the white population in the rural areas still had a slightly higher proportion of home onwership than the white population at the state level. In 1960, 86.2 percent of the white rural population lived in owner-occupied housing; by 1970 this percentage had increased slightly to 86.8 percent. Eighty five percent of the state's white population lived in owner-occupied housing ,both in 1960 and in 1970. By comparison, only 13.8 percent of the rural nonwhite population lived in owner-occupied housing in 1960 and by 1970 this percentage had fallen to 13.2 percent. For the state the percent of nonwhite owner-occupied housing increased slightly from 14.9 percent to 15.0 percent.

In general it appears that the percentage changes over the decade have been so small that one can assume that little overall proportional change has taken place with regard to home ownership. The rural area still has a substatially higher percentage of home ownership than the state as a whole except in the case of nonwhite ownership. The decline in nonwhite home ownership in the rural area

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[5] Sources of data for this section were: 1960 Census of Housing, General Housing Characteristics, Georgia. 1970 Census of Housing, General Housing Characteristics, Georgia.

Table 8. Family Income by Percent of Families in each Income Group, 1959 and 1969: Sample.

	Total		White		Nonwhite	
Income	1959	1969	1959	1969	1959	1969
Less than $1,000	18.0	5.0	13.5	4.0	32.2	9.0
1,000-1,999	21.3	9.9	17.6	7.9	33.2	17.6
2,000-2,999	16.1	8.4	15.4	6.6	18.3	15.5
3,000-3,999	12.1	8.8	13.6	7.3	7.3	14.6
4,000-4,999	10.1	8.4	12.1	7.6	3.9	11.4
5,000-5,999	8.0	8.8	9.9	8.9	1.9	8.2
6,000-6,999	5.0	8.1	6.1	8.6	1.2	6.4
7,000-7,999	3.3	7.7	4.1	8.4	.8	4.9
8,000-8,999	2.1	7.2	2.6	8.0	.4	3.9
9,000-9,999	1.2	5.9	1.4	6.8	.2	2.1
10,000+	2.8	21.8	3.7	25.9	.6	6.4

Source: U.S. Census, 1960, General Social and Economic Characteristics, Georgia.
U.S. Census, 1970, General Social and Economic Characteristics, Georgia.

Table 9. Family Income by Percent of Families in each Income Group, 1959 and 1969: State.

	Total		White		Nonwhite	
Income	1959	1969	1959	1969	1959	1969
Less than $1,000	9.6	3.4	6.3	2.4	20.4	7.3
1,000-1,999	12.9	5.5	9.0	3.8	25.5	11.7
2,000-2,999	13.1	5.7	10.4	4.1	21.8	11.4
3,000-3,999	12.1	6.1	11.8	4.6	13.0	11.7
4,000-4,999	11.1	6.5	12.2	5.4	7.7	10.5
5,000-5,999	10.3	7.2	12.0	6.6	4.6	9.4
6,000-6,999	8.0	7.1	9.7	7.0	2.5	7.0
7,000-7,999	6.1	7.2	7.5	7.4	1.7	6.7
8,000-8,999	4.4	7.0	5.4	7.5	1.0	5.3
9,000-9,999	3.2	6.3	3.9	6.9	.7	4.1
10,000+	9.2	38.0	11.8	44.3	1.1	14.2

Source: U.S. Census, 1960, General Social and Economic Characteristics, Georgia.
U.S. Census, 1970, General Social and Economic Characteristics, Georgia.

could be in part due to the great decline in farming among the nonwhite population and in part due to the heavy nonwhite outmigration from the sample counties.

The absolute value of owner-occupied housing units increased slightly more at the state level than for the rural sample, although the percentage increase was higher in the rural area. The median value of rural owner-occupied housing increased by 61.5 percent as compared with an increase of 54.7 percent at the state level. The median value of rural owner-occupied housing units increased from $5,413 to $8,744 over the decade, while the median value of housing at the state level increased from $9,500 in 1960 to $14,700 in 1970.

Conclusion

This study is one of a series connected with the Southern Regional Research Project S-79, "Rural Development and the Quality of Life in the Rural South". The present paper has contributed to that project by delineating certain demographic and socioeconomic changes which have occurred in the open-country rural areas of Georgia during the past decade.

In general the study found that trends which have been occurring for some time did not change during the past decade. There was still a heavy outmigration from the rural areas and in general the rural population was aging more rapidly than the population of the state as a whole. There was a significant decline in the total dependency ratio but rural levels were still considerably higher than the ratios for the state population, particularly for the nonwhite population. The level of fertility declined considerably for both groups and the fertility rates were about the same for both groups although fertility was generally higher for nonwhites in both groups.

The major economic change during the past decade in the rural areas was the rapid decline of agriculture and the increasing role of manufacturing. Unemployment was low in the rural regions, although considering the low levels of income in the rural regions, it would seem that underemployment may be a serious problem. Although both areas enjoyed a considerable amount of economic growth during the decade it does not appear that the economic gap between the rural open-country areas and the rest of the state has been narrowed to any great degree.

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CHANGING CHARACTERISTICS OF THE WEST VIRGINIA POPULATION: 1940-1970

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CHANGING CHARACTERISTICS OF THE WEST VIRGINIA POPULATION: 1940-1970

INTRODUCTION

Efforts concerning the identification, description, and occasionally, the explanation of selected population trends experienced by stipulated aggregates are abundant in demographic literature. Such studies usually are intended either to add to the existing stock of historical data with respect to experience at any given organizational level, or are pursued in an effort toward enlightenment about unique demographic patterns, or are preliminary steps for projection or prediction. Often, all of these motivations are present. Whatever the intention may be in any demographic trend research, almost invariably one will find diverse population patterns drawn together in a relatively succinct and integrated statement.

West Virginia qualifies as a worthwhile locus for demographic trend research in several respects. Perhaps foremost among these reasons is that there is a dearth of integrated trend information for the West Virginia population. Moreover, West Virginia holds the distinction of being the only state east of the Mississippi River to have lost population between 1950 and 1970--owing almost exclusively to net out-migration. Also significant is the lack of industrial-occupational diversity of West Virginia due to the monolithic predominance of coal (and lumber) mining. Waxings and wanings of demand for coal extraction have figured heavily in the differential migration rates that have marked the State's population loss.

The present investigation was motivated by West Virginia's unique, interesting and relatively unexplored population history in recent decades. An attempt has been extended to embrace most of the characteristics of demographic concern into a meaningful exposition for the State. More specifically, data have been collected for 1940, 1950, 1960, and 1970 to illustrate: (i) population size, distribution and composition for West Virginia and its rural and urban subunits during this period; and, (ii) the changing fertility pattern that occurred between 1940 and 1970.

DATA COLLECTION

Data for the present study were taken from the 1940, 1950, 1960, and 1970 U. S. Censuses of Population, U. S. Department of Commerce, Bureau of the Census. Whenever available information permitted, data were compiled to reflect differences with respect to total, urban and rural populations for the United States, the South Atlantic Division, and West Virginia. An attempt was made to discern significant change in the characteristics of the West Virginia population and to compare these changes with those of the South Atlantic Division and the United States.

DATA ANALYSIS AND INTERPRETATION

The following analysis is intended to provide an overview of the most important benchmarks of West Virginia's recent population changes. Selected data were pursued and organized into tables and occasionally into graphs to illustrate structural shifts with respect to age, sex, residence, schooling, occupation, industry, and fertility. While race is not regarded as unimportant, West Virginia has had a relatively small nonwhite population in recent decades. This being so, racial comparisons were excluded in an effort toward brevity of exposition, concentrating on what are thought to be more important characteristics of West Virginia: 1940-1970.

Size and Distribution

A very brief picture of the size of West Virginia's population is presented in Table I with additional indication of the manner in which the population was distributed between its rural and urban components. Perhaps the most conspicuous characteristic which becomes visible when the West Virginia trend is compared with the Division and the United States is that the State has endured a severe loss of population between 1950 and 1970, while the other two areas have experienced appreciable gains. In fact, the South Atlantic Division has outstripped the United States in population growth over each of the 1940-1970 census recordings. This casts West Virginia into an even more aberrant mold, compared with the Division of which it is a member state.

Also illustrated is extent to which the State has been lagging behind concerning urbanization. Both West Virginia and the United States showed losses of rural population between 1940 and 1970. However, West Virginia's rural losses were much heavier and its urban gain in 1960 was only a fraction of the United States counterpart. Moreover, the State actually experienced a loss of urban population in 1970, compared with a significant urban gain for the United States. The urban-rural disparity is even more pronounced when the State is compared with the South Atlantic Division. Here, one may note the heavy urbanization experienced by the Division, particularly in 1950 and 1960. Table Ia and Figure I are provided to further emphasize these rates of urbanization. The convergence of the Division towards the national rural-urban picture is noteworthy, as is the fact that West Virginia was almost exactly as urbanized in 1970 as the Division was in 1940.

TABLE I

TOTAL, URBAN, AND RURAL POPULATIONS FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION, AND WEST VIRGINIA: 1940-1970

AREA	1940	1950	1960	1970
United States:				
Total	131,669,275 (7.2)*	151,325,798 (14.9)	179,323,175 (18.5)	203,184,772 (13.3)
Urban	74,423,702 (7.9)	96,846,817 (30.1)	125,268,750 (29.3)	149,280,769 (19.2)
Rural	57,245,573 (6.4)	54,478,981 (-4.8)	54,054,425 (-0.8)	53,884,804 (-0.3)
South Atlantic Census Division:				
Total	17,823,151 (12.8)	21,182,335 (18.8)	25,971,732 (22.6)	30,671,337 (18.1)
Urban	6,921,726 (21.4)	10,391,163 (50.1)	14,851,516 (42.9)	19,524,948 (31.5)
Rural	10,901,425 (7.9)	10,791,172 (-1.0)	11,120,216 (3.0)	11,146,389 (0.2)
West Virginia:				
Total	1,901,974 (10.2)	2,005,552 (-7.2)	1,860,421 (-7.2)	1,744,237 (-6.2)
Urban	534,292 (8.7)	694,487 (29.9)	711,101 (2.4)	679,491 (-4.4)
Rural	1,367,682 (10.8)	1,311,065 (-4.1)	1,149,320 (-12.3)	1,064,746 (-7.4)

*Percent change from previous census

Source: U. S. Department of Commerce, Bureau of Census, Census of Population

TABLE Ia

PERCENTAGE OF THE TOTAL POPULATION URBAN AND RURAL, FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION, AND WEST VIRGINIA: 1940-1970

Area	1940	1950	1960	1970
United States:				
Urban	56.5	64.0	69.9	73.5
Rural	43.5	36.0	30.1	26.5
South Atlantic Census Division:				
Urban	38.8	49.1	57.2	63.7
Rural	61.2	50.9	42.8	36.3
West Virginia:				
Urban	28.1	34.6	38.2	39.0
Rural	71.9	65.4	61.8	61.0

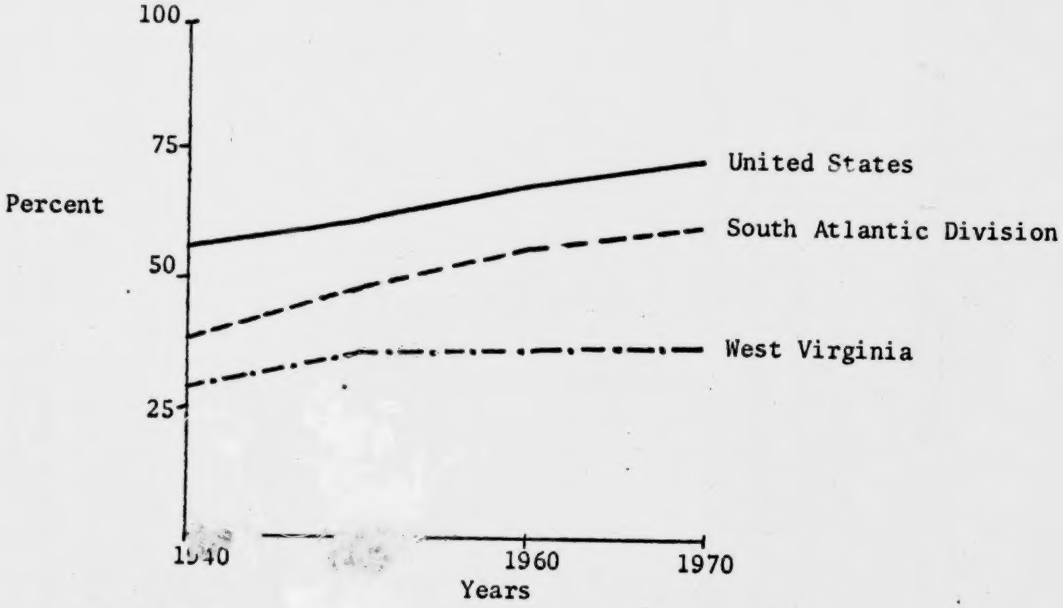


FIGURE I
[illegible] POPULATION URBAN

Composition: Age and Sex

The percent distribution by age and sex is provided in Table II for West Virginia's population, 1940-1970, and for the United States in 1970. In an effort to afford greater readability, population pyramids are presented to illustrate a comparison of the State between 1940 and in 1970, and a comparison between West Virginia: 1970 and the United States: 1970. These pyramids are portrayed in Figure IIa and Figure IIb, respectively.

Investigation of this information clearly reveals that the age composition of West Virginia has shifted toward a fairly close approximation with the United States by 1970. It is interesting to note that West Virginia's pyramid for 1940 illustrates the triangular shape which one confronts when viewing the population pyramid of a less developed area. Moreover, the depression-years "pinch" in the 0-4 and 5-9 age categories stand out sharply in this pyramid just as this contraction appears among the 40-44 and 45-49 age categories in 1970 for both the State and the United States. Additionally, the 1970 pyramids in Figure IIb readily portray the declining birth rates which occurred during the 1960's in West Virginia and in the rest of the United States.

It is thought that the convergence of the State with the United States was accountable primarily to out-migration. It is known that out-migration from the state was differentially greater among younger adults, and this would account for the growth in the percent of the total population among older age groups (which even exceeded the percent of total population distributed among the older age groups in the United States in 1970).

The percent of population under 15 years of age and 65 years of age and older is presented in Table IIa, comparing West Virginia with the United States for 1940, 1950, 1960, and 1970. This information also has been assembled into Figure III to distinguish the direction of change with greater clarity.

At least three characteristics are immediately noticeable. One of these is that there has been a general convergence between West Virginia and the United States, between 1940 and 1970, with respect to the percent of their respective populations under 15 years of age. By comparison, their respective populations of aged persons (65 years of age and older) have been much more similar over this thirty year period.

Another characteristic which seems noteworthy, is that the trends of these two areas with respect to each of the two age categories under consideration have crossed each other. This means that West Virginia has moved from its initial position of a comparatively smaller percent of its population in the older dependent age range (65+) to an ultimate position of more dependent persons in its population than the United States has.

Finally, one may note that, since 1960, both the State and the Nation have experienced a decrease in percentage of total population under 15 years of age, and an increase in percentage of total population 65 years of age and older.

TABLE II

PERCENT DISTRIBUTION BY AGE AND SEX FOR WEST VIRGINIA: 1940-1970, AND FOR THE UNITED STATES: 1970

Age	West Virginia 1940 T	 1940 M	 1940 F	 1950 T	 1950 M	 1950 F	 1960 T	 1960 M	 1960 F	 1970 T	 1970 M	 1970 F	United States 1970 T	 1970 M	 1970 F
75+	1.5	1.4	1.5	2.1	2.1	2.1	3.3	3.2	3.4	4.2	3.7	4.7	3.8	3.0	4.5
70-74	1.5	1.6	1.4	1.9	2.0	1.9	2.6	2.6	2.6	3.0	2.8	3.2	2.7	2.3	3.0
65-69	2.3	2.5	2.2	2.8	2.9	2.8	3.4	3.4	3.4	3.9	3.6	4.1	3.2	3.2	3.7
60-64	2.9	3.0	2.7	3.3	3.4	3.1	4.0	4.0	4.0	4.9	4.7	5.0	4.2	4.1	4.4
55-59	3.6	3.8	3.4	3.9	4.0	3.8	4.7	4.6	4.7	5.5	5.5	5.6	4.9	4.8	5.0
50-54	4.3	4.5	4.1	4.6	4.7	4.5	5.3	5.4	5.3	5.9	5.8	6.0	5.5	5.4	5.5
45-49	5.1	5.2	4.9	5.3	5.3	5.3	6.0	6.0	6.0	6.2	6.2	6.3	6.0	5.9	6.0
40-44	5.7	5.8	5.5	6.1	6.1	6.1	6.2	6.1	6.4	6.0	5.9	6.2	5.9	5.9	5.9
35-39	6.5	6.4	6.7	6.9	6.8	6.9	6.6	6.4	6.8	5.1	4.9	5.3	5.5	5.5	5.5
30-34	7.2	7.1	7.3	7.1	6.9	7.3	6.3	6.0	6.5	5.2	5.1	5.2	5.6	5.7	5.6
25-29	8.2	8.1	8.4	7.9	7.7	8.1	5.4	5.1	5.7	5.6	5.7	5.6	6.6	6.7	6.6
20-24	9.1	8.8	9.4	8.0	7.6	8.3	5.7	5.4	5.9	7.4	7.1	7.6	8.1	8.0	8.1
15-19	10.8	10.6	11.0	8.3	8.0	8.5	8.4	8.5	8.3	9.9	10.3	9.5	9.4	9.7	9.0
10-14	10.8	10.7	10.9	9.5	9.7	9.4	10.9	11.2	10.5	10.1	10.7	9.6	10.2	10.7	9.8
5- 9	10.1	10.1	10.1	10.2	10.4	10.1	10.7	11.1	10.4	9.1	9.6	8.5	9.8	10.3	9.4
0- 4	10.3	10.3	10.4	12.0	12.2	11.8	10.6	10.9	10.2	7.9	8.4	7.5	8.4	8.8	8.1

Source: U. S. Department of Commerce, Bureau of Census, Census of Population

FIGURE IIa
Percent distribution by age for the West Virginia Population: 1940 and 1970

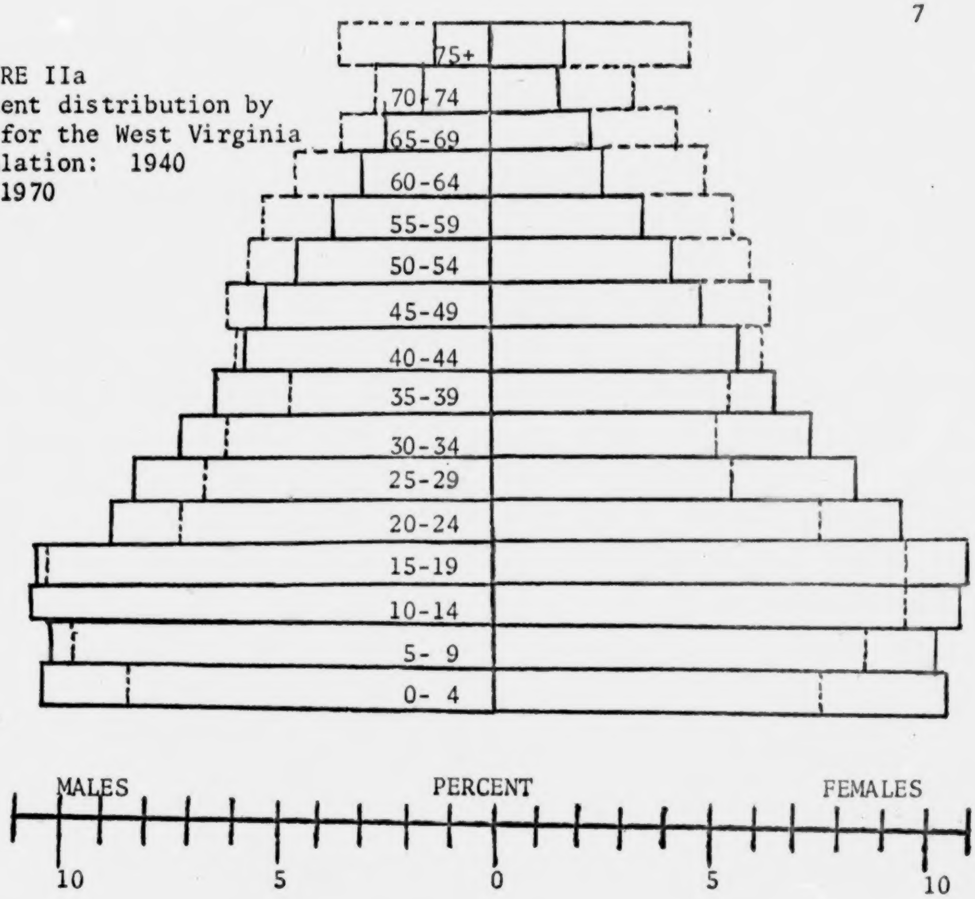
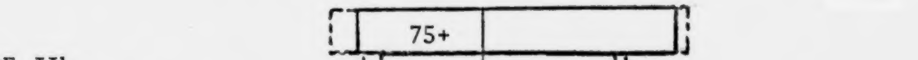


FIGURE IIb
Percent distribution by age for the West Virginia and United States populations: 1970



KEY: Broken line refers to the West Virginia population in 1970.

TABLE IIa

PERCENT OF POPULATION UNDER 15 YEARS OF AGE AND 65 YEARS OF AGE AND OLDER FOR THE UNITED STATES AND WEST VIRGINIA: 1940-1970

Area	Percent under 15 years of age				Percent 65 years of age and older			
	1940	1950	1960	1970	1940	1950	1960	1970
United States	25.0	26.9	31.1	28.4	6.9	8.2	9.0	9.7
West Virginia	31.2	31.7	32.2	27.1	5.3	6.8	9.3	11.1

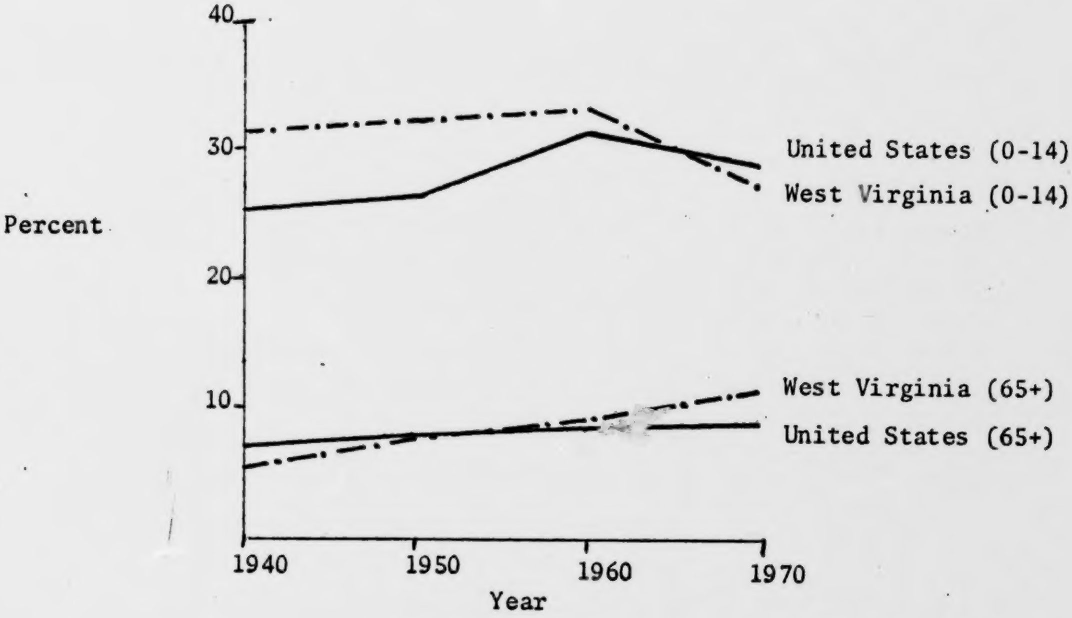


FIGURE III
PERCENT OF POPULATION UNDER 15 YEARS OF AGE AND 65 YEARS OF AGE AND OLDER

Differences in the age and sex structure of a given population may be seen by comparing rural and urban residence patterns among its inhabitants. In an effort to obtain an impression of these trends for the areas in question, median ages by sex and rural-urban residence for West Virginia, the South Atlantic Division, and the United States: 1940-1970, are presented in Table III, and in Figure IV below.

The median age for females is higher in nearly every case, irrespective of year, area, or rural or urban residence. Additionally, Figure IV vividly illustrates that the median age was higher among rural populations, from 1940 to 1970 in both the State and the Nation, although sizable convergence between the rural and urban medians has been experienced by both areas. As was the situation concerning the crossing trends with respect to 0-15 and 65+ age groups, West Virginia and United States age medians also cross paths. This is to be expected, and owes to the same explanation (heavy out-migration of young adults in West Virginia).

The final analysis with respect to age and sex composition concerns the sex ratio, with comparisons between urban and rural residence in West Virginia, the South Atlantic Division, and the United States. This data is portrayed in Table IV, and Figure V.

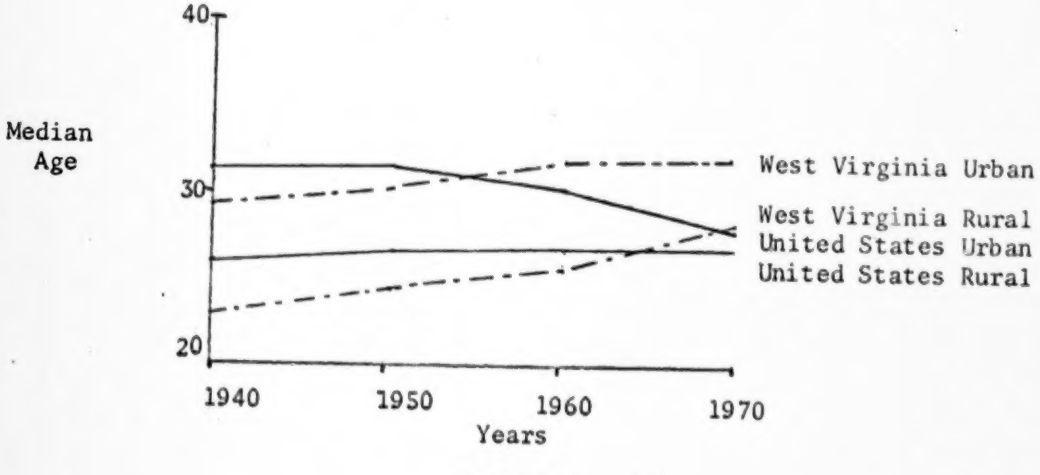


FIGURE IV
MEDIAN AGE BY RURAL AND URBAN RESIDENCE
FOR THE UNITED STATES AND WEST VIRGINIA

TABLE III

MEDIAN AGE BY SEX AND RURAL-URBAN RESIDENCE FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION AND WEST VIRGINIA: 1940-1970

Area and Sex	1940			1950			1960			1970		
	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban
United States:												
Total	29.0	(26.1)*	31.0	30.2	(27.1)	31.6	29.5	27.3	30.4	28.1	27.9	28.1
Males	29.1	(26.4)	31.0	29.9	(27.1)	31.2	28.7	26.7	29.4	26.8	27.2	26.7
Females	29.0	(25.6)	31.1	30.5	(27.1)	32.0	30.3	27.9	31.2	29.3	28.7	29.5
South Atlantic Census Division:												
Total	25.5	(23.0)	29.1	27.3	(23.8)	29.9	27.5	24.8	29.4	27.7	27.1	28.0
Males	25.3	(23.1)	28.9	26.8	- -**	- -	26.4	- -	- -	26.3	26.1	26.4
Females	25.6	(22.8)	29.3	27.7	- -	- -	28.6	- -	- -	29.1	28.0	29.7
West Virginia:												
Total	24.3	(22.4)	29.1	26.3	23.8	30.2	28.5	25.9	31.9	30.0	28.7	32.3
Males	24.7	(22.5)	29.1	26.4	24.1	30.0	27.7	25.4	30.9	28.5	27.8	29.6
Females	24.0	(21.9)	28.8	26.1	23.4	30.3	29.2	26.4	32.7	31.5	29.5	34.8

*Average of rural farm and rural non-farm medians
** Not available
Source: U. S. Department of Commerce, Bureau of Census, Census of Population.

TABLE IV

SEX RATIO FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION, AND WEST VIRGINIA: 1940-1970

Area	1940	1950	1960	1970
United States:				
Total	100.7	98.7	97.1	94.8
Urban	95.5	94.5	94.1	93.0
Rural	107.8	106.2	104.3	100.1
South Atlantic Census Division:				
Total	99.1	98.2	96.7	95.0
Urban	91.7	92.3	92.7	93.1
Rural	104.0	104.2	103.1	99.3
West Virginia:				
Total	103.8	100.7	96.8	93.9
Urban	94.6	93.6	90.7	88.1
Rural	107.5	104.7	100.8	97.8

Source: U. S. Department of Commerce, Bureau of Census, Census of Population.

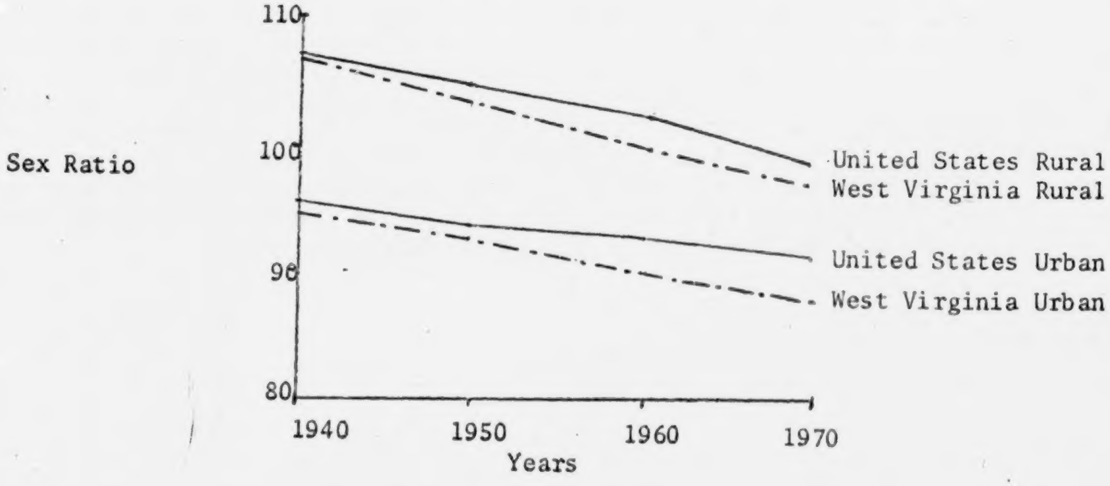


FIGURE V
SEX RATIO BY RURAL AND URBAN RESIDENCE FOR THE UNITED STATES AND WEST VIRGINIA

The data compiled is rather uninformative. One may note that all three areas have experienced declining sex ratios among both urban and rural residents, and also may see that the West Virginia sex ratios are consistently lower than those of the United States. Perhaps this is accounted for by heavier out-migration from West Virginia by males. However, the differences in the sex ratio figures between the areas are slight with no stark contrast to invite efforts at explanation.

Composition: Marital Status and Education

Information with respect to marital status is illustrated in Table V. Included is a percent distribution of those males and females who were either single, married, widowed, or divorced in West Virginia, the South Atlantic Division, and the United States in 1940, 1950, 1960 and 1970. Observing these percentage figures, one is struck with the remarkable similarity between marital status categories when males and females in West Virginia are compared with their counterparts in the South Atlantic Division and the United States. The only aberrations of any note were the West Virginia females who were single or widowed in 1940, or widowed in 1970. Even here, however, the differences from their counterparts were not profound. Perhaps one might argue that the overall similarity itself is extraordinary, especially when West Virginia was undergoing a change in population opposite to that of the Division and the United States.

The differences that are revealed when median years of school completed for the population 25 years of age and older in West Virginia, the South Atlantic Division, and the United States are compared, are as remarkable as the similarities found in marital status. Evidence exposing this is easily seen by reference to Table VI and Figure VI. Females consistently had higher median years of school completed than males in each area and year, and all three areas experienced steady increases in the median years of school completed by their respective populations. More importantly, however, is the fact that the United States consistently has shown medians nearly a full year higher than the South Atlantic Division. And, most importantly, while West Virginia had the same total median as the Division in 1940, the State fell significantly below the Division by 1970. It also may be informative to note that the total, male, and female medians in West Virginia for 1970 were almost exactly the same as the United States counterpart medians were in 1960, ten years earlier.

TABLE V

MARITAL STATUS BY PERCENTAGE OF POPULATION SINGLE, MARRIED, WIDOWED, AND DIVORCED FOR MALES AND FEMALES IN THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION AND WEST VIRGINIA: 1940-1970

Area and Sex	1940				1950				1960				1970			
	S[1]	M[2]	W[3]	D[4]	S	M	W	D	S	M	W	D	S	M	W	D
United States:																
Males	33.2	61.2	4.3	- -*	26.2	67.6	6.1(W+D)		25.1	69.1	3.6	2.1	28.6	65.8	2.9	2.7
Females	25.8	61.0	11.5	- -	20.1	65.7	14.2(W+D)		19.1	65.9	12.2	2.8	22.4	61.3	12.4	3.9
South Atlantic Census Division:																
Males	33.5	61.8	3.9	- -	27.5	67.4	5.1(W+D)		26.1	68.7	3.3	1.8	28.3	66.4	2.8	2.5
Females	25.8	60.7	12.1	- -	20.4	65.6	14.0(W+D)		19.2	65.9	12.4	2.5	21.4	62.2	12.8	3.6
West Virginia:																
Males	33.9	59.6	3.6	0.9	27.5	67.2	3.7	1.9	26.0	68.2	3.8	2.0	27.5	66.6	3.4	2.5
Females	28.1	61.5	9.2	1.3	20.7	66.8	10.2	2.2	20.0	65.1	12.3	2.6	21.3	61.3	14.1	3.3

*Not available.

Source: U. S. Department of Commerce, Bureau of Census, Census of Population.

[1] Single
[2] Married
[3] Widowed
[4] Divorced

TABLE VI

MEDIAN YEARS OF SCHOOL COMPLETED FOR THE POPULATION 25 YEARS OF AGE AND OLDER IN THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION AND WEST VIRGINIA FROM 1940 TO 1970 FOR MALES, FEMALES AND THE TOTAL POPULATION

Area and Sex	1940	1950	1960	1970
United States:				
Total	8.4	9.3	10.6	12.1
Males	8.3	9.0	10.3	12.1
Females	8.5	9.6	10.7	12.1
South Atlantic Census Division:				
Total	7.8	8.6	9.8	11.4
Males	7.5	8.3	9.3	11.3
Females	8.0	8.8	10.2	11.5
West Virginia:				
Total	7.8	8.5	8.8	10.6
Males	7.7	8.4	8.7	10.3
Females	8.0	8.6	8.9	10.8

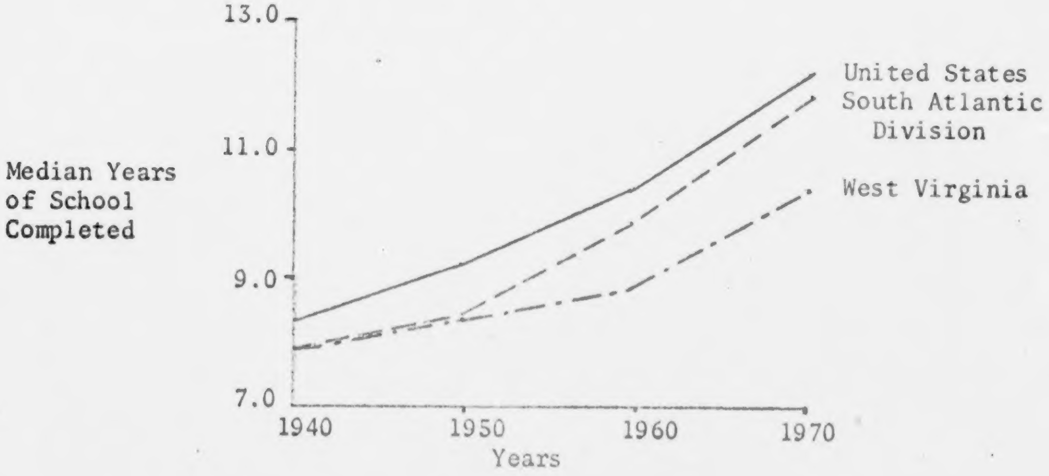


FIGURE VI
MEDIAN YEARS OF SCHOOL COMPLETED FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION, AND WEST VIRGINIA

Composition: Occupation and Industry

Table VII depicts the percent distribution of employed persons by occupation, for the United States, the South Atlantic Division, and West Virginia: 1950-1970. Investigating these occupational categories individually, it may be seen that while in all areas there has been a growth in percent of professional, technical and kindred workers, West Virginia has failed to catch up to the Division and Nation by 1970.

However, among proprietors, managers, and nonfarm officials a convergence has occurred. The national percentage figures have declined, while the State and the Division have increased. By 1970, the Division and the Nation revealed equal percentages in this category, while the West Virginia percentage figure remained slightly lower.

The farmer and farm managers category of workers has declined very significantly in all three areas, with the State consistently demonstrating the lowest percentage of employed persons in these occupations. Conversely, clerical, sales, and kindred workers have scored percentage gains in each area, with West Virginia once again positioned at the bottom during each year.

The percentage of craftsmen, foremen, and kindred workers has been rather stable for the United States: 1940-1970, while these occupations have increased slightly in the Division and to a greater extent in West Virginia over this period of time. Operatives and kindred workers have declined in each area, and the decline has been significantly greater in West Virginia. This suggests a measure of convergence for the State towards the percentage situations in the Division and the United States.

Farm foremen, laborers, and unpaid family workers demonstrated the same pattern of decline in each area that farmers and farm managers experienced for 1940-1970. Once again, West Virginia consistently presented the lowest percentage figures.

While West Virginia nonfarm laborers failed to demonstrate the percentage declines which occurred in the Division and in the Nation, the most significant extent of convergence with these other two areas did transpire in the service workers occupational category. Whereas the State held a significantly smaller percentage of its workers in this category in 1940, by 1970 the percent of service workers was almost exactly the same in West Virginia, the South Atlantic Division, and the United States. In summary, West Virginia exhibited a more blue collar labor force than the Division or the United States but some convergence with the occupational percent distributions of these other two areas seems apparent.

TABLE VII

PERCENT DISTRIBUTION OF EMPLOYED PERSONS BY OCCUPATION FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION, AND WEST VIRGINIA: 1950-1970*

(Employed Persons: 14 years old and over for 1950 and 1960 and 16 years old and older for 1970)

	1950			1960			1970		
Occupation	U.S.	S.A.D.	W.V.	U.S.	S.A.D.	W.V.	U.S.	S.A.D.	W.V.
Professional, Technical and Kindred Workers	8.7	7.6	7.3	11.2	10.2	10.3	14.8	14.0	12.5
Proprietors, Managers, and Officials (Except Farm)	8.9	7.8	7.4	8.4	8.2	7.7	8.3	8.3	7.9
Farmers and Farm Managers	7.6	9.2	5.9	3.9	3.8	2.5	1.9	1.4	0.9
Clerical, Sales and Kindred Workers	19.3	16.7	14.6	21.6	19.7	18.4	25.1	24.0	20.1
Craftsmen, Foremen, and Kindred Workers	13.8	12.1	14.4	13.5	12.7	15.0	13.9	14.2	17.4
Operatives and Kindred Workers	19.8	20.2	31.0	18.4	19.0	23.9	17.6	18.4	21.6
Farm Foremen, Laborers, and Unpaid Family Workers	4.2	6.8	3.7	2.2	3.4	1.6	1.2	1.7	0.7
Non-farm Laborers	6.1	7.0	6.4	4.8	5.6	6.2	4.5	5.0	6.2
Service Workers	10.1	11.3	7.7	11.1	12.5	10.2	12.8	12.9	12.8
Occupation Not Reported	1.3	1.4	1.5	4.9	5.0	4.2	- -	- -	- -

* Data for 1940 occupational groups were available only by sex. Total percent distribution of employed persons was not presented.

Source: U.S. Department of Commerce, Bureau of Census, Census of Population.

The percent distribution by major industry for employed persons that is provided in Table VIII reveals some interesting facts. For example, although the construction industry maintained a stable percentage of workers in the United States between 1950 and 1970, it increased its share in both the South Atlantic Division and in West Virginia during this time. A similar development transpired with respect to wholesale and retail trade. Manufacturing also followed a similar pattern between 1950 and 1960, but the percent of employed persons in manufacturing in the Division and in the State stabilized between 1960-1970.

The public administration, services (business, personal, entertainment and professional) and finance, insurance and real estate industrial categories all experienced steady percentage growth from 1950 to 1970 in the State, the Division, and the Nation. Concerning each of the categories, West Virginia consistently held the lowest percentage figures during each year.

Figure VII is presented so that the percent distributions for persons employed in agriculture, forestry and fisheries and in mining may be more sharply delineated. The substantial declines which occurred in all three areas between 1950 and 1970 with respect to agriculture, forestry and fisheries are easily seen. It is noteworthy that West Virginia held the lowest percentage of persons employed in this category in 1950, 1960, and 1970.

The most extraordinary difference observable between the three areas concerns the mining industry. Figure VII vividly illustrates the contrast between West Virginia, where the mining percentage is high, and the Division and the Nation where persons employed in mining constitute almost negligible percents. West Virginia's trend between 1950 and 1970 was one of convergence with the Division and the Nation, but in 1970 the differences still were extreme.

TABLE VIII

PERCENT DISTRIBUTION BY MAJOR INDUSTRY GROUP FOR EMPLOYED PERSONS FOR THE UNITED STATES, THE SOUTH ATLANTIC CENSUS DIVISION, AND WEST VIRGINIA: 1950-1970*

(Employed Persons: 14 years old and older for 1950 and 1960 and 16 years old and older for 1970)

	1950			1960			1970		
Industry	U.S.	S.A.D.	W.V.	U.S.	S.A.D.	W.V.	U.S.	S.A.D.	W.V.
Agriculture, Forestry, and Fisheries	12.5	16.7	9.8	6.7	8.0	4.4	3.7	3.8	2.1
Mining	1.7	2.4	21.4	1.0	1.1	11.0	0.8	0.8	8.8
Construction	6.1	6.6	5.1	5.9	6.8	5.4	6.0	7.2	7.3
Manufacturing	25.9	21.7	18.9	27.1	23.7	23.3	25.9	24.1	23.2
Transportation, Communication and other public utilities	7.8	6.7	8.5	6.9	6.3	8.8	6.7	6.6	7.9
Wholesale and Retail trade	18.8	16.9	15.5	18.2	17.7	18.0	20.0	19.3	19.1
Finance, Insurance and Real Estate	3.4	2.6	1.6	4.2	3.7	2.3	5.0	4.5	2.7
Services: Business, Personal, Entertainment and Professional	18.0	18.7	15.0	21.0	21.9	19.9	26.1	27.0	24.7
Public Administration	4.4	6.1	2.6	5.0	6.8	3.5	5.5	7.6	4.1
Industry not reported	1.5	1.5	1.6	4.0	4.0	3.2	- -	- -	- -

*Data for 1940 major industry groups were available only by sex and state. Total percent of major industry groups was not presented.

Source: U. S. Department of Commerce, Bureau of Census, Census of Population.

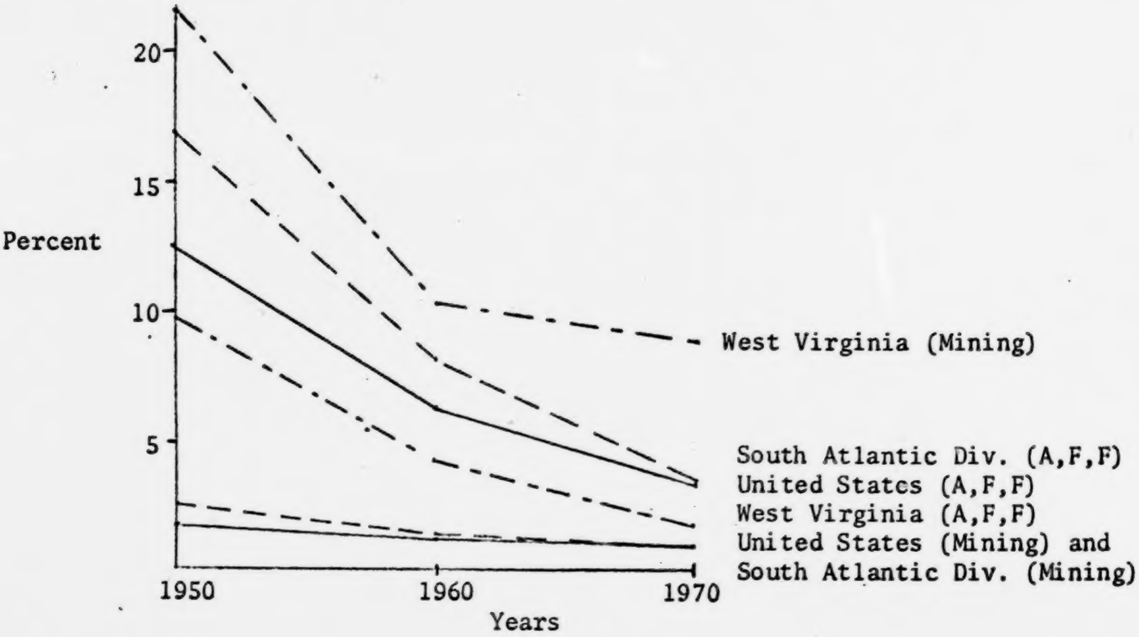


FIGURE VII
PERCENT DISTRIBUTION FOR EMPLOYED PERSONS BY AGRICULTURE, FORESTRY AND FISHERIES (A,F,F) AND MINING FOR THE UNITED STATES, THE SOUTH ATLANTIC DIVISION, AND WEST VIRGINIA

Fertility

The changing fertility patterns for the United States and West Virginia: 1940-1970 are presented in Table IX. It is evident that the number of children even born per 1,000 women (15-44) and child-woman ratio for the rural population are remarkably higher than the urban population in the United States and West Virginia. However, the differences in the number of children ever born and the child-woman ratio for urban and rural populations of West Virginia are more pronounced than those of the United States.

A further glance at Table IX indicates that the number of children ever born per 1,000 women increased between 1950 and 1970 for the United States and West Virginia and their urban and rural components, with one exception for the State of West Virginia (children ever born per 1,000 women for rural population decreased between 1950 and 1960). The child-woman ratio for the United States and West Virginia declined sharply between 1960 and 1970.

TABLE IX

NUMBER OF CHILDREN EVER BORN AND CHILD-WOMAN RATIO FOR THE UNITED STATES AND WEST VIRGINIA: 1940-1970

Area	Children Ever Born Per 1,000 Women (35-44)				Child-Woman Ratio		
	1940*	1950	1960	1970	1950	1960	1970
United States:							
Total	2,262	2,122	2,468	2,956	450	536	369
Urban	1,792	1,791	2,269	2,840	406	517	357
Rural	2,994	2,813	3,000	3,291	543	567	387
West Virginia:							
Total	- -	2,714	2,813	3,030	- -	492	353
Urban	- -	1,845	2,221	2,647	- -	451	300
Rural	- -	3,335	3,236	3,282	- -	519	335

*Data available for "native white women" only.

- - Data for children ever born: 1940 and child-woman ratio: 1950 are not available for West Virginia.

Source: U. S. Department of Commerce, Bureau of Census, Census of Population.

SUMMARY AND CONCLUSIONS

An attempt has been made in this paper to trace West Virginia's population history during the thirty year period from 1940 to 1970. Efforts were concentrated upon those characteristics thought to be the most salient benchmarks of the State's structural change, and, where possible, comparisons were made with the United States and with the South Atlantic Division, of which West Virginia is a member state.

It was noted that the State lost population between 1940 and 1970, while the Division and Nation scored sizable gains, and furthermore, that West Virginia lags far behind with respect to urbanization. There has been a convergence of West Virginia's percent distribution by age toward the pyramid form exhibited by the United States in 1970. It is thought that out-migration played a dominant role in reshaping the State's percent distribution by age.

Although the State and the Nation both increased their percentages of persons 65 years of age and older and decreased (since 1960) their respective percentages of persons under 15 years of age, West Virginia has traded places with the United States between 1940 and 1970, ending the period with a higher percentage of older residents. State, Division, and National females exhibited higher median ages, as did rural inhabitants in these areas. The rural-urban differences converged in the State and Nation, but the State demonstrated higher medians for both.

Sex ratios and marital status were remarkably similar for West Virginia, the South Atlantic Division, and the United States between 1940 and 1970. However, when median years of school completed for the population 25 years of age and older were compiled, West Virginia revealed itself to be significantly lower than the Division and Nation by 1970.

West Virginia possessed a more blue collar labor force than the Division or the United States, but generally seemed to be converging with these other two areas between 1950 and 1970. This also may be stated with respect to the comparison of industrial categories, although the State's percent of persons employed in mining was still considerably higher by 1970.

The number of children ever born increased in West Virginia and the United States between 1950 and 1970, while the child-woman ratio sharply declined between 1960 and 1970 in both the State and the Nation. Moreover, the differences between urban and rural populations with respect to both of these calculations were more pronounced in the State than in the Nation, with rural populations consistently reflecting the higher figures.

In summary, West Virginia generally appears to be converging with the Division and Nation in many respects, although its discordant figures concerning urbanization, education, and mining still stand out as glaring contrasts.

RESIDENTIAL MIGRATIONS AND ASPIRATIONS OF BLACK HOMEMAKERS: A COMPARISON OF COUNTRY, TOWN, AND METROPOLITAN RESIDENTS IN EAST TEXAS[†]

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INTRODUCTION

Contemporary literature in sociology and demography abounds with references to the diminishing movement of blacks from rural to metropolitan areas, and to their relatively slow residential relocation from metropolitan central cities to fringe areas.[1] Apparently, the black populations of Texas and some other Southern states have curtailed traditional out-migration to outlying states, as well.[2] Various estimates of residential mobility concerning blacks seem to be inconsistent. Simmons (1968:633) has noted that: "Studies of ethnic and racial groups have generated a complex, and often contradictory, body of theory about their intraurban movements." One report of residential mobility in Los Angeles was prefaced with the comment: "Ethnicity as a confounding factor was eliminated by choosing non-ethnic neighborhoods" (Butler, _et al_., 1964.142).

Perhaps the most imaginative and thorough survey of current residential preferences and potential for migration is the recent study of Dillman and Dobash (1972). Their study, a telephone directory sample of the population of the state of Washington, employed a fairly complex set of residential categories operationalized by sizes such as "50,000-149,999," kinds of "region" (e.g., "small metropolitan"), and residence location preferred (e.g., "near downtown"). Unfortunately the first report of this investigation has just been received and much of the detail is still not published. Moreover, the questionnaire did not attempt to ascertain race or ethnic status so that no direct comparison is possible with our population or our findings.

At the risk of adding confusion rather than clarification to the issue of residential mobility among blacks, this paper is based on a study of homemakers in two East Texas counties. In the late 1960's a national study was designed by researchers at 13 state agricultural experiment stations to focus on "disadvantaged" families. The information utilized in this report is drawn from the much larger universe of data gathered in the Texas portion of this study in which all information was obtained by interviewing homemakers. Both nonmetropolitan and metropolitan areas in Texas were purposely chosen with that population in mind.

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The nonmetropolitan respondents include the entire eligible universe in communities believed to be reasonably modal East Texas places. The metropolitan sample is from an area that was selected as approximately typical of predominantly black sections of a large central city on the basis of early census data. In the nonmetropolitan county which is not near any metropolitan area, respondents comprised all eligible homemakers in two small open country black communities (combined N=52), and in the black population of the county seat of approximately 5,000 inhabitants (N=207). The metropolitan county, Harris, contains the city of Houston, and its respondents are a sample from the Fifth Ward area of that city (N=294). Each of the 553 women included in the total sample was under 65 years of age, and was the principal homemaker in her household which included at least one child under eighteen years of age. The respondents were interviewed in their homes by black female interviewers, using a schedule of items which took somewhat over an hour to complete. The interviews were conducted during the summers of 1970 (nonmetropolitan) and 1971 (metropolitan) with the intent of gaining information relative to the quality of living among rural and metropolitan black households, as seen by female homemakers.[3]

Although some demographic research indicates that patterns of residential mobility affecting household members are most closely associated with the male head-of-family, there are substantial justifications for using female respondents, as done in this study.[4] A recent report by Blevins (1971:515-517) notes that differences in unemployment for Negro females among rural and urban samples were insignificant, and that almost equal percentages of Negro males and females in his sample planned a future move. One of our tacit assumptions, therefore, is that the residential mobility histories, aspirations, and expectations of these female respondents are as reliable as those of males would have been relative to understanding the migration tendencies of blacks in low-income communities. Another underlying assumption, discussed more fully in following paragraphs, is that the reported moving intentions of respondents are effective indicators of subsequent behavior.

In short, this paper is a descriptive analysis of selected black homemakers who reside in relatively typical low-income residential areas of East Texas. Factors examined in the analysis includes the type of residential area---metropolitan, nonmetropolitan town, or nonmetropolitan country---in which the respondent resided; the age or life-cycle-stage, i.e., young, early middle, and late middle, of the homemaker; the tenure status of the household, _viz_ renter, owner, or gratis occupant; the reported place of residence of the homemaker five years previously; the number of residential moves made by the respondent within the past five years; and the type of residential area in which most of the homemaker's life had been spent. In addition to the variables mentioned above, our analysis also includes attitudinal responses from the homemakers relative to their intentions of staying in or moving from their present residences, and to their idealized type of residence area. An attempt has been made to see what bearing, if any, the different background variables had on these black homemakers residential aspirations, expectations, and ideals relative to permanent location.

CHARACTERISTICS OF RESPONDENTS

As an introduction to the study of black homemakers in East Texas two tables are presented at the outset. Table 1 is basic to our study in that it focuses on the types of residential areas in which the respondents live. Both metropolitan-nonemtropolitan and rural-urban comparisons are made possible through its use. Table 2 is equally important inasmuch as age, or life-cycle-stage, divisions of the study population are shown therein. Taken together, these initial tables provide a concise summary of respondents characteristics found in our study. In the following paragraphs of this section, we have attempted to highlight the most salient points suggested by Tables 1 and 2.

Current Residence: Of the 553 total homemakers interviewed, 294 (53.2 percent) resided in the Houston metropolitan ares; 207 (37.4 percent) lived in the nonmetropolitan county seat town; and 52 (9.4 percent) were inhabitants of open country areas in that same nonmetropolitan county. In contrast to this distribution of interviewees, the 1970 Census showed that 75.5 percent of Texas' black population lived in metropolitan counties. Of the 343,236 blacks residing in nonmetropolitan counties, in 1970, some 51.4 percent lived in urban places and 48.6 percent were in rural areas. In brief, our selection of homemakers was overrepresentative of nonmetropolitan town blacks, and underrepresentative of both metropolitan blacks and rural nonmetropolitan ones.

Age: Basic to all aspects of residential mobiltiy and migration is the age variable. In this study, the age of the homemaker on the interview date was used. Three classifications were derived for our study: those under 25 years (N=86); those 25 through 44 years (N=325); and those homemakers whose ages were 45 through 64 years (N=142). These age ranges were selected because they approximate different "life-cycle-stages," and thus, are amenable to comparison with a number of studies in the literature on residential movement. There was an obvious shortage of young black homemakers in the nonmetropolitan country area, and a concomitant overrepresentation of older homemakers there. Whereas both the metropolitan area and the nonmetropolitan town samples had approximately 17 percent of their populations in the "under 25" class, the nonmetropolitan country area's proportion was only four percent. Similarly, in both urban areas 45-to-64 year-olds amounted to about 24 percent of the sample populations, but the rural area had 36 percent in this oldest age class.

Tenure: The respondents were asked if their housing was owned, rented, or occupied "gratis." The results showed frequencies of 195, 342, and 15, respectively. The distribution of these three categories by age and current residence is given in the tables. The most noteable observations are the confirmation that ownership of ones housing is increasingly common with advancing age, and that there is a residential continuum--metropolitan central city residents are less commonly owners while the country dwellers are likely to be owners (county homemakers in this study are also much older, and there are almost no young homemakers there).

Size of Household: The number of persons reported to be residing in the homemakers' households was divided into three classes; namely small

Table 1. General Characteristics of Black Homemakers and Their Households by Current Residence Location

Characteristic	Current residence of homemaker		
		Nonmetropolitan	
	Metropolitan	Town	Country
	Percent		
AGE OF HOMEMAKER			
Under 25 years	16.7	16.9	3.8
25-44 years	58.5	58.9	59.6
45-64 years	24.8	24.1	36.5
Total percent	100.0	99.9	99.9
Total number*	294	207	52
TENURE OF HOUSING			
Owner	9.6	60.4	80.8
Renter	89.4	35.7	11.5
Occupying gratis	1.0	3.9	7.7
Total percent	100.0	100.9	100.0
Total number*	293	207	52
SIZE OF HOUSEHOLD			
Small (2 or 3 members)	34.7	20.8	11.5
Intermediate (4-6)	47.9	53.6	63.5
Large (7 or more)	17.3	25.6	25.0
Total percent	99.9	100.0	100.0
Total number*	294	207	52
PROXIMITY OF CURRENT RESIDENCE TO BIRTHPLACE OF HOMEMAKER			
Less than 50 miles	26.9	86.5	90.4
50 or more miles, same state	40.5	8.2	7.7
50 or more miles, different state	32.6	5.3	1.9
Total percent	100.0	100.0	100.0
Total number*	294	207	52
NUMBER OF FAMILY "MOVES" IN PAST 5 YEARS			
None	49.3	48.2	65.2
1-2 moves	38.8	46.4	30.4
3-4 moves	10.6	4.2	4.3
5 or more moves	1.2	1.2	0.0
Total percent	99.9	100.0	99.9
Total number*	245	168	46
PROXIMITY TO PLACE OF RESIDENCE OF HOMEMAKER IN 1965			
Same Community	91.8	85.3	80.8
Different Community, Same County	0.3	7.8	15.4
Different County	7.9	6.9	3.8
Total percent	100.0	100.0	100.0
Total number*	291	204	52

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*The potential numbers were 294 in metropolitan areas, 207 in the nonmetropolitan town, and 52 in the nonmetropolitan country. Smaller numbers are caused by nonresponse, or by the fact that the family had not been in existence for 5 years in the case of "family moves."

Table 2. General Characteristics of Black Homemakers and Their Households, by Age of the Homemaker

Characteristic	Age of homemaker (years) Under 25	25-44	45-64
CURRENT RESIDENCE			
Metropolitan	57.0	52.9	51.4
Nonmetropolitan Town	40.7	37.5	35.2
Nonmetropolitan Country	2.3	9.5	13.4
Total percent	100.0	99.9	100.0
Total number*	86	325	142
TENURE OF HOUSING			
Owner	19.8	34.3	47.2
Renter	74.4	63.3	51.4
Occupying gratis	5.8	2.5	1.4
Total percent	100.0	100.1	100.0
Total number*	86	324	142
SIZE OF HOUSEHOLD			
Small (2 or 3 members)	47.7	20.0	31.7
Intermediate (4-6)	47.7	53.8	48.6
Large (7 or more)	4.6	26.1	19.7
Total percent	100.0	99.9	100.0
Total number*	86	325	142
PROXIMITY OF CURRENT RESIDENCE TO BIRTHPLACE OF HOMEMAKER			
Less than 50 miles	58.1	56.9	49.3
50 or more miles, same state	19.8	24.3	31.0
50 or more miles, different state	22.1	18.8	19.7
Total percent	100.0	100.0	100.0
Total number*	86	325	142
NUMBER OF FAMILY "MOVES" IN PAST 5 YEARS			
None	11.5	44.8	69.1
1-2 moves	73.1	45.9	24.5
3-4 moves	11.5	7.9	6.5
5 or more moves	3.8	1.4	0.0
Total percent	99.9	100.0	100.1
Total number*	26	290	139
PROXIMITY TO PLACE OF RESIDENCE OF HOMEMAKER IN 1965			
Same Community	72.6	90.7	92.2
Different Community, Same County	7.1	3.7	5.0
Different County	20.2	5.6	2.8
Total percent	99.9	100.0	100.0
Total number*	84	322	141

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[*] The potential numbers were 294 in metropolitan areas, 207 in the nonmetropolitan town, and 52 in the nonmetropolitan country. Smaller numbers are caused by non-response, or by the fact that the family had not been in existence for 5 years in the case of "family moves."

(two or three persons); intermediate (four to six persons); and large (seven or more persons). Household members were defined as permanent occupants at the time of interview, and included nonrelated persons as well as persons related to the homemaker. The figures shown in the Tables illustrate the differences in household size by age and by place of current residence. Of the 553 homemakers in our study, 151 homemakers (27.3 percent) lived with only one or two other persons; 285 (51.5 percent) shared their housing with three to five others; and 117 of them (21.2 percent) resided in a household with at least six more persons. From Tables 1 and 2, it may be noted that small households are more characteristic of young homemakers than of either older group. And in view of the fact that over half of all young homemakers in our study resided in the metropolitan area, the prevalence of small households there was expected. Large households on the other hand, were predominant among the early middle-aged homemakers, not among the oldest ones. Of the 117 large households, 72.6 percent had homemakers between the ages of 25 and 44.

Proximity to Place of Birth: In order to obtain some notion as to the extent of migration already experienced by these homemakers, a question relating to their place of birth was included. The following classifications were employed: (1) birthplace less than 50 miles from current residence; (2) birthplace more than 50 miles from current residence, but within the state of current residence; (3) same as 2 above, except birthplace was outside state of residence. It was found that of the total number of homemakers, 305 (55.2 percent) were within 50 miles of their birthplace; 140 (25.3 percent) were in the same state of birth, but more than 50 miles away; and 108 (19.5 percent) were living in a different state than that of their nativity, and at a distance greater than 50 miles from their birthplace. Comparisons of current residence with place of birth by age of homemaker and the type of current residential area in which the respondent lives yielded an unanticipated result. In contrast to the preceding characteristics on which the young homemakers tended to differ notably from those 25 years and older, in this case they are relatively similar. Most, in spite of the reputed mobility of youth, had not moved far from their place of birth. On the other hand, the great majority of metropolitan respondents had moved more than 50 miles from their original homes to come to Houston. Table 3 demonstrates from a different perspective that those homemakers who had moved more than 50 miles from their birthplace had adopted the metropolitan area overwhelmingly, 85 percent of all homemakers born in Texas and nearly 90 percent from out of state were metropolitan residents. From our analysis of the data, it appears that the 45-to-64 year-old homemakers, rather than either of the younger homemaker groups, have migrated from their birthplace in greater proportions--but of course they had more time to have done so.

Mobility Status: The respondents residential mobility history was tapped by asking how many permanent changes of residence their households made during the five years previous to the interview. Homemakers representing households which had not been in existence five years prior to the interview were excluded from consideration. In response to that question, 50.3 percent of the eligible number said they had not changed residences in the previous five-year period. Of the 226 residentially mobile homemakers, 82.3 percent had moved once or twice; 15.5 percent had moved three or four times; and 2.2 percent had moved five times or more during the preceding five-year period. Tables 1 and 2 provide age and

Table 3. Current Residence of Black Homemaker by Proximity to Place of Birth

Current residence	Proximity of current residence to place of homemaker's birth		
	Less than 50 miles	Greater than 50 miles	
		In same state	In different state
Metropolitan city (53.2)*	25.9	85.0	88.8
Nonmetropolitan town (37.4)	58.7	12.1	10.2
Nonmetropolitan country (9.4)	15.4	2.9	1.0
Total percent (100.0)	100.0	100.0	100.0
Total number (553)	305	140	108

*Indicates percentage residential distribution of the total number of respondents.

residential attributes for the 455 homemakers whose households had been in existence for five or more years. Homemakers in the beginning stage of the family life-cycle quite obviously had been more residentially mobile than either of the two older respondent categories. Equally prominent is the fact that country homemakers were much less mobile over the five-year period than the town and metropolitan homemakers. About 50 percent of the Houston and town homemakers had changed place of residence in the five-year span but only one third of the country homemakers had done so.

Recent Migration Status: Having looked at the homemakers' proximity to place of birth as a measure of past migration, we asked each respondent where she had lived in 1965, about five years prior to the interview date. Household formation was not used as a criterion in this question as it was in the residential mobility item. The homemakers' responses were categored in three segments: (1) In the same community; (2) In the same county, but a different community; and (3) In a different county. Of the 547 homemakers who answered this question, 88.3 percent were living in the same community. An additional 4.6 percent were residing in the same county, although in a different community. And 7.1 percent had changed county-of-residence in the five years, i.e., using conventional demographic definition, these 39 homemakers are classified as migrants. Tables 1 and 2 present relevant age and residence comparisons for migrant homemakers as well as for those who remained closer to their 1965-66 place of residence. Two apparent patterns emerge in thses tables. First, as age increases, the likelihood of moving to a different community within five years decreases. Over 90 percent of the two older groups were still living in the same community after five years whereas only about 70 percent of the young homemakers were. Secondly, the tables show that homemakers in the nonmetropolitan areas were less residentially stable relative to their 1965 community of residence than were metropolitan homemakers. The latter, of course, may have moved to different sectors of the same large metro community of Houston while the former could have moved lesser distances and yet have reflected change of communities. Clearly, the metropolitan homemakers had been the most migratory and the country homemakers least migratory when using change of counties as the criterion for migration.

Household Head. The homemakers in this study showed a strong tendency to bear the role of head of the household as well. Among the 552 women who identified the head of their household, 48.5 percent were carrying that responsibility themselves. In the metropolitan group the percentage was 60.2, and for the nonmetropolitan county homemakers taken together it was 34.8. In the open country the homemaker was also head of the household in 36.5 percent of the 52 cases, while in the town the comparable figure was 34.5 percent of 206. That these figures reflect the real situation cannot be stated with confidence, however, since the public welfare regulations give a strong preference to assisting fatherless households, and respondents may thus have slanted their answers in the interview. The 1970 census figures do not indicate proportions of female-headed households anywhere near as high for our study areas.

ANALYSIS AND FINDINGS

In this section we are concerned with the interrelations between the respondents' background and present status, on the one hand, and their orientations toward places of residence and geographic or residential mobility on the other. Since the effort has been intentionally exploratory our findings are tentative and suggestive rather than definitive, but we believe they are useful.

Ideal Type of Community for Residence: An important aspect of any person's orientations is her aspiration or what one would desire if she could have her "choice of all choices." Each black homemaker was requested by the interviewer to "Tell me in which of the following kinds of places would you most desire to live for the rest of your life if you could live anywhere you wanted to." The response was given in two stages. First each was asked whether she would prefer to live "in a city, near a city, or not near a city." After choosing one of these alternatives, she was then asked to further clarify her response. If she indicated a preference to live in a city, she was asked to distinguish whether in a "very large city, a middle-sized city, or a small city." (The terms were not further operationalized since we found that most people simply could not relate to actual population sizes with any degree of accuracy.) If for the first question she chose either "near a city" or "not near a city," then she was asked whether her preference lay "in a town or village, in the country but not on a farm, or on a farm." The tabulation of the responses by the respondents' current place of residence is given in Table 4 in full detail.

The most noticeable aspect of these responses is the strong preference for communities generally similar to the place of current residence. That is, 69 percent of the Houston homemakers preferred a middle-sized or large urban place, while 63.2 percent of the respondents from the town of 5,000 selected either a "small city" or a "town or village," and 82.7 percent of the open country respondents chose a similar ideal. A succinct expression of the observed pattern is that "the grass looks greenest on this side of the fence." Certainly, as other researchers have reported, there is no evidence of a "back to the farm" interest among metropolitan blacks.

Looking at the data in another way (Table 5), 94 percent of the respondents who expressed a desire to live in a "very large city" were

Table 4. Ideal Type-of-Residence Preferences of Black Homemakers by Area of Current Residence

Type-of-residence preferences	Current Residence Metropolitan	Nonmetropolitan Town	Country
	---Percent---		
In a City (Subtotal)	(72.7)	(23.1)	(7.6)
Very large city	55.1	4.3	0.0
Middle-sized city	13.9	8.7	3.8
Small city	3.7	10.1	3.8
Near a City (Subtotal)	(20.8)	(47.9)	(15.4)
Town or village	11.6	37.7	5.8
Open country, nonfarm	7.5	9.2	7.7
On a farm	1.7	1.0	1.9
Not Near a City (Subtotal)	(6.4)	(28.9)	(76.9)
Town or village	2.0	15.4	3.8
Open country, nonfarm	4.4	10.6	38.5
On a farm	0.0	2.9	34.6
Total percent	99.9	99.9	99.9
Total number	294	207	52

Table 5. Current Residence of Black Homemakers, by Ideal Type-of-Residence Preferences

"Tell me which of the following kind of places you would most desire to live for the rest of your life if you could live anywhere you wanted to:"	Current Residence Metropolitan	Nonmetropolitan Town	Country	Total
In a City (266)	80.4	18.0	1.5	99.9
Very large city (171)	94.7	5.3	0.0	100.0
Middle-sized city (61)	67.2	29.5	3.3	100.0
Small city (34)	32.4	61.8	5.9	100.1
Near a City (168)	36.3	58.9	4.8	100.0
Town or village (115)	29.6	67.8	2.6	100.0
Open country, nonfarm (45)	48.9	42.2	8.9	100.0
On a farm (8)	62.5	25.0	12.5	100.0
Not Near a City (119)	16.0	50.4	33.6	100.0
Town or village (40)	15.0	80.0	5.0	100.0
Open country, nonfarm (55)	23.6	40.0	36.4	100.0
On a farm (24)	0.0	25.0	75.0	100.0

already living in one; 80 percent of those who preferred to live "not near a city but in a town or village" were then residing in a nonmetropolitan town; and of those who preferred to live on a farm "not near a city" (only 24 out of the 553 respondents), 75 percent were then living in the nonmetropolitan open country (we did not have good information as to whether they lived on farms). The other categories are more ambigious, since they are hard to match to our sample residence areas. It is particularly notable that 53 homemakers preferred to live in the country near a city, and that 27 (over 50 percent) of these were currently living in the central city of the Houston SMSA.

Since both age and current type of residential community may be expected to influence the desired type of community,[5] Table 6 provides ideal community preferences of homemakers in each age group by their current place of residence. In studying Table 6 one observes that among metropolitan homemakers as age increases the desire to live permanently in the city decreases. Furthermore, as the ages of metropolitan homemakers increase, the propensity to select both town/village and non-farm but country as ideals increases.[6]

Among the town homemakers, the youngest respondents were quite distinctive from their older counterparts. Over 40 percent of the young, townswomen cited a city location as being ideal whereas 20 percent or less of the older homemaker groups there did. On the other hand, only one fourth of the young preferred town/village while nearly 60 percent of both older groups did. Finally, the young black females chose country/farm as an ideal in greater proportions than either of the older groups (31 percent versus 22 percent respectively).

The country homemakers overwhelmingly favored rural-open country and farm residence. Recalling that only two of them were under 25 years old, and that 80 percent own their homes, the strong preference shown is somewhat more understandable. To summarize the findings shows in Table 6, one may say that among black homemakers, as age increases, the tendency to prefer nonmetropolitan residence grows stronger.

Table 7 reflects a regrouping of idealized places of residence. The three city categories are combined, the two different town/village situations are placed together, and the four country and farm choices are linked into one. This scheme for combining ideal areas of residence is related to the possible ambiguity of our schedule items. The distinction between "near a city," and "not near a city" proved to be less clear than we anticipated. Table 7 reveals that young town homemakers were more likely than either of the older town homemaker cohorts to prefer residence in the country, a fact which runs somewhat counter to expectations. Taking account of the evidence of the young homemakers' greater inclination to live in a large or middle-sized city as well (25.7 percent), it appears possible that the young town women may be more intent on moving to any area different from their present one, than is true for the older respondents. Secondly, the 45-to-64 year-old Houston women were proportionately more desirous of residence in a town or village than were either of the two younger metropolitan groups. This finding has several implications for further research. Among them, it raises a question about the attractiveness of small towns for black homemakers in the later stages of the family-life-cycle. These observations may well be compared with those regarding

Table 6. Ideal Type-of-Residence of Black Homemakers, by Current Residence and Age of Homemakers

Ideal type-of-residence	Current residence and age of homemaker									Total	
	Metropolitan			Nonmetro. town			Nonmetro. country			N	%
	<25	25-44	45-64	<25	25-44	45-64	<25	25-44	45-64		
	Percent										
In a very large city	53.1	55.8	54.8	5.7	4.9	2.0	0.0	0.0	0.0	171	30.9
In a middle-sized city	20.4	16.3	4.1	20.0	4.9	10.0	50.0	3.2	0.0	61	11.0
In a small city	8.2	1.7	5.5	17.1	9.0	8.0	0.0	3.2	5.3	34	6.1
In a town or village	8.2	12.8	19.2	25.7	59.0	58.0	50.0	6.4	10.5	155	28.0
In the country, not on farm	8.2	11.0	16.4	28.6	18.0	18.0	0.0	51.6	42.1	100	18.1
On a farm	2.0	2.3	0.0	2.9	4.1	4.0	0.0	35.5	42.1	32	5.8
Total percent	100.1	99.9	100.0	100.0	99.9	100.0	100.0	99.9	100.0		99.9
Total number	49	172	73	35	122	50	2	31	19	553	

Table 7. Ideal Type-of-Residence Preferences of Black Homemakers, by Current Residence and Age

Age of homemaker / Preferred ideal type-of-community for residence	Current Residence: Metropolitan	Current Residence: Nonmetropolitan Town	Current Residence: Nonmetropolitan Country
Homemakers under 25 years			
In a city	81.7	42.8	50.0
In a town or village	8.2	25.7	50.0
In the country	10.2	31.5	0.0
Total percent	100.1	100.0	100.0
Total number	49	35	2
Homemakers aged 25-44 years			
In a city	73.8	18.8	6.4
In a town or village	12.8	59.0	6.4
In the country	13.3	22.1	87.1
Total percent	99.9	99.9	99.9
Total number	172	122	31
Homemakers aged 45-64 years			
In a city	64.4	20.0	5.3
In a town or village	19.2	58.0	10.5
In the country	16.4	22.0	84.2
Total percent	100.0	100.0	100.0
Total number	73	50	19

preferred place of residence treated below, as another way of getting at a related aspect of desired type of community.

Desire to Change Community of Residence: To know something about the ideal type of residential area preferred by the homemakers was a necessary but not a sufficient focus of our study. This section is devoted to an examination of the respondents' expressed desire to change their residential locale. Several characteristics of the homemakers have been controlled so that we might see what factors may impinge upon their desire to move away from their present locations. It is assumed that the homemaker's residential preference is a strong indicator of her household's future location.[7]

Table 8 presents information concerning the homemakers' desire to move away from their present community or remain where they were living, when current residence and tenure status are controlled. In every residence category, nonowning homemakers were more desirous of moving away from the present community than were owners. The magnitude of difference is greater in the nonmetropolitan areas. More than three times as many town nonowners as town owners wanted to change communities, and over six times as many country nonowners as country owners wished to leave the community.

In Table 9, consideration was given to both age level and to place of current residence in looding at the homemakers' expressed desire to stay within or move from their respective communities. For each age category,

Table 8. Desire of Black Homemakers to Move Away from Current Community, by Current Residence and Tenure

Current residence/ Desire to move	Tenure	
	Owners	Nonowners
Metropolitan		
Want to move	22.2	29.0
Do not want to move	77.8	70.9
Total percent	100.0	99.9
Total number	27	265
Nonmetropolitan town		
Want to move	15.2	45.7
Do not want to move	84.8	54.3
Total percent	100.0	100.0
Total number	125	81
Nonmetropolitan country		
Want to move	4.8	30.0
Do not want to move	95.2	70.0
Total percent	100.0	100.0
Total number	42	10

Table 9. Black Homemakers' Desire to Move from Current Community of Residence, By Age and Current Residence

"Do you want to move away from (insert name of this place)?"	Current Residence			Totals, by age and aspiration
	Metropolitan	Nonmetropolitan		
		Town	Country	
Homemakers under 25 years:				
Want to move	40.8	45.7	100.0	44.2
Do not want to move	59.2	54.3	0.0	55.8
Total percent	100.0	100.0	100.0	100.0
Total number	49	35	2	86
Homemakers 25-44 years:				
Want to move	27.3	27.3	9.7	25.6
Do not want to move	72.7	72.7	90.3	74.4
Total percent	100.0	100.0	100.0	100.0
Total number	172	121	31	324
Homemakers 45 years or older:				
Want to move	23.6	14.0	0.0	17.0
Do not want to move	76.4	86.0	100.0	83.0
Total percent	100.0	100.0	100.0	100.0
Total number	72	50	19	141
All Homemakers:				
Want to move	28.6	27.0	7.7	26.3
Do not want to move	71.4	73.0	92.3	73.7
Total percent	100.0	100.0	100.0	100.0
Total number	293	206	52	551

the metropolitan and town respondents were proportionately more desirous of leaving the present community than the country ones, with one exception---both country homemakers under 25 years wanted to move away. Generally, regardless of residential location, the younger the homemaker, the more probable it was that she wanted to move from her present community.

Support for the contention that nonowners are more desirous of changing community-of-residence than owners is found in Table 10.[8] Whereas the percentage of owners and nonowners in the metropolitan areas who wish to move is relatively equal, the differences between those who own and those who do not in both nonmetropolitan areas are pronounced. Whereas the percentage of those who desired to move varied little between owners and nonowners in the metropolitan group, the differences between tenure classes were striking in the town and country categories. In particular, the proportion of town nonowners who wanted to move (45.7 percent) was very high, especially in light of the fact that only 20 in this group were under 25 years of age, where the desire to move in general is heightened.

Some persons who desire to move to another community never actually make the move, as indicated previously. We have no assurance that the expectation of moving is a great deal better as an indicator of future behavior than the simple desire to move, but we included an additional question in our interviews to tap this dimension. The question was: "Do you ever really expect to move away from (name of homemaker's community)?" The result of a cross-tabulation of the desire to move with the homemakers' expectation to do so is provided in Table 11.

The most notable observation is that the homemakers who did not want to move very rarely had any expectation of doing so. These potential movers appear to be drawn almost entirely from the universe of those who want to move. On the other hand, about 14 percent of the metropolitan homemakers who expected to move (N=62) said they did not want to move. Likewise, roughly 14 percent of the metropolitan homemakers who expected not to move (N=230) said they wanted to move. In the nonmetropolitan areas the proportion expecting to move but not wanting to do so was always under 10 percent.

The deflection from desire to expectation varied by residence, as can be seen in Table 11 also. In every category of present residence the number wanting to move was greater than that expecting to move. The consistency between the homemakers' aspiration to move and their expectations of doing so (when they desired to move) was higher in the nonmetropolitan areas than in Houston.

Another way of looking at the homemakers' expressed desires to move away from their present community or remain there is to compare their residential aspirations with their records of residential movement over the past five years. As Tables 1 and 2 revealed, we classified our respondents into three groups based on their community of residence five years before the interview. For the purpose of analysis at this point, we have combined those who had lived in different communities ("in same county" and "in other county") into a "moved" category. Thus, it is

Table 10. Black Homemakers' Desire to Move from Current Community of Residence, by Tenure and Current Residence

Tenure Status of Homemaker	Current Residence Metropolitan	Town	Country	Total
Owner (N)	(27)	(125)	(42)	(194)
Want to move	22.2	15.2	4.8	13.9
Don't want to move	77.8	84.8	95.2	86.1
Total percent	100.0	100.0	100.0	100.0
Nonowner (N)	(265)	(81)	(10)	(356)
Want to move	29.1	45.7	30.0	32.9
Don't want to move	70.9	54.3	70.0	67.1
Total percent	100.0	100.0	100.0	100.0

Table 11. Black Homemaker's Expectation of Moving from Her Current Community, by Her Desire to Move and Her Current Residence

Desire to move/ Expectation of moving	Current Residence		
	Metropolitan	Nonmetropolitan	
		Town	Country
	Percent		
Homemakers wanting to move			
Expect to move	63.1	75.0	80.0
Do not expect to move	36.9	25.0	20.0
Total percent	100.0	100.0	100.0
Total number	84	56	5
Homemakers not wanting to move			
Expect to move	4.3	2.0	0.0
Do not expect to move	95.7	98.0	100.0
Total percent	100.0	100.0	100.0
Total number	208	150	47
All Homemakers			
Expect to move	21.2	21.8	7.7
Do not expect to move	78.8	78.2	92.3
Total percent	100.0	100.0	100.0
Total number	292	206	52

possible to compare the residential aspirations of the homemakers by age, current residence and recent residential history, as indicated in Table 12. Although their numbers are very small, among the young homemakers those who currently resided in Houston but had lived elsewhere in 1965 were proportionately most desirous of moving. In that age category the least ambitious with respect to moving were those who had been living in Houston at least five years ("stable").

For the 25-to-44 year-old homemakers as well, those most desirous of changing communities were the metropolitan inhabitants who had just recently moved there. The homemakers with the least aspiration to move in this age range were the country women who had changed communities since 1965. Finally, in the case of the oldest homemakers those most interested in a change of locale were the metropolitan 45 to 64 year-olds who had changed communities since 1966. As expected, the least concerned about moving away were the country homemakers, regardless of whether or not they had switched communities of residence in the past five years.

SUMMARY AND IMPLICATIONS

This study is an exploratory effort to see what light may be shed on black migration by examination of the aspirations and behavior of homemakers in metropolitan and nonmetropolitan Texas. We have reported the more obvious patterns of age and residential difference and intend to refine the analysis in the future.

With the current concern over population and vehicle pressure in the nation's major cities, some have suggested the need to encourage relocation of people into the countryside. In this regard, we found a strong preference among the black metropolitan residents for city living and correspondingly little evidence of a "back to the farm" potential there. The possibility of some families moving to small towns appears greater, but it must be remembered that we are focusing on aspirations and not actual movements of people.

The strongest pattern of preference observed among our respondents was to live in places within the broad size category in which they were already residing. In other words, the Houston homemakers greatly preferred a middle-sized or large city (69 percent), our nonmetropolitan town respondents predominately chose places in the small city-town-village range (63 percent), and the country homemakers overwhelmingly favored living in the country (83 percent). Or, looking at this same matter from a different angle, the majority of our respondents already were living in the kind of community they preferred: 94 percent who preferred a very large city were already in one, 80 percent of the homemakers preferring to live "not near a city but in a town or village" were in our town sample, and 75 percent of the women who would opt for living on a farm not near a city were already in the nonmetropolitan country group. These were the clearest "matches" to our respondent residence categories, but since our preference categories were not clearly operationalized to the homemakers we have to allow, for example, that the county seat town residents could have considered their community as either a small city, or a town. Grouping these categories together we found that 69 percent who desired one of these classes was currently living in the town of 5,000. On the other hand,

Table 12. Black Homemakers' Desire to Move from Current Community of Residence, by Age, Residence and Mobility Status.

Age/Residence/ Desire to Move	Mobility Status* since 1965: Stable	 Moved
Homemakers under 25 years		
Metropolitan current residence (N):	(37)	(12)
Want to move	32.4	66.7
Do not want to move	67.6	33.3
Total percent	100.0	100.0
Nonmetro. Town current residence (N):	(23)	(10)
Want to move	43.5	40.0
Do not want to move	56.5	60.0
Total percent	100.0	100.0
Nonmetro. country current residence (N):	(1)	(1)
Want to move	100.0	100.0
Do not want to move	0.0	0.0
Total percent	100.0	100.0
Homemakers 25-44 years		
Metropolitan current residence (N):	(161)	(9)
Want to move	25.5	66.7
Do not want to move	74.5	33.3
Total percent	100.0	100.0
Nonmetro. Town current residence (N):	(106)	(15)
Want to move	24.5	46.7
Do not want to move	75.5	53.3
Total percent	100.0	100.0
Nonmetro. country current residence (N):	(25)	(6)
Want to move	12.0	0.0
Do not want to move	88.0	100.0
Total percent	100.0	100.0
Homemakers 45-64 years		
Metropolitan current residence (N)	(69)	(3)
Want to move	23.2	33.3
Do not want to move	76.8	66.7
Total percent	100.0	100.0
Nonmetro. Town current residence (N):	(45)	(5)
Want to move	15.6	0.0
Do not want to move	84.4	100.0
Total percent	100.0	100.0
Nonmetro. country current residence (N):	(16)	(3)
Want to move	0.0	0.0
Do not want to move	100.0	100.0
Total percent	100.0	100.0

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*All homemakers who had moved from their 1965 community are considered "moved," and all who still resided in the 1965 community are categorized as "stable."

one notable exception was found: fifty-three of our 553 homemakers expressed the desire to live near a city but in the country (farm and nonfarm combined), and 27 of these (51 percent) were living in the central city of Houston at the time.

The age variable is basic to the analysis of mobility, and this study again demonstrated its critical importance. In summary, we found that the young homemakers expressed a stronger preference for the large city, and that as age increased the tendency to opt for nonmetropolitan residence also grew larger. This generalization held soundly for the total group, and for the metropolitan and open country respondents, but was not so strong for the town women. In fact, for town women age did not seem to be a very important variable except when the women were divided at age 25, and in this case the young homemakers expressed an unusually strong interest in living in the country (31.5 percent). This was a greater tendency to country living than indicated by either other young group, and greater than the older town women as well. It may be that the young town women were really indicating a desire to move away from their present town location--either to a larger city or to the country--rather than a meaningful interest in rural living.

In addition to asking about the ideal type of residence community the women might like to live in, we also asked them directly whether they wanted to move from their present community. Two generalizations seem justified. First, regardless of current residential location, the younger the homemakers the more likely they were to desire to move away from their present community. Second, the metropolitan and town homemakers were generally similar to one another and rather distinctly different from the open country women, age for age. In general the metropolitan and town women wanted to move more than their country sisters.

It has often been stated that home owners are less likely to move than those who rent or otherwise obtain housing. In every residence category our nonowning homemakers were more desirous of moving away from the present community than were owners. The magnitude of the difference was not very great in the metropolitan sample (22 compared to 29 percent), but was quite substantial in the town and country groupings. In the town the proportion of nonowners wanting to move was three times that of owners, and in the country it was six times.

Our analysis of the relationship between previous mobility and the desire to move is hampered by small numbers in many categories, since we felt that both present residence and age needed to be controlled. Bearing in mind the caution that the small N's require, the following generalizations are suggested. (1) Among present metropolitan homemakers, regardless of age, those who had moved to their current residence since 1965 were more inclined to move away from there than those who had been living in the same community since before 1965. This was not true of some nonmetropolitan homemakers. Thus being a mover seems related to the desire to move again for those in the large city and for some others in the nonmetropolitan areas. (2) In general, the younger the homemaker the greater the propensity to move (but this is not quite borne out by the data for the 25-to-44 year-old "moved" group who showed a slight edge over the under-25 group).

Several implications for future research are derived from this exploratory effort. First and foremost is the need to get at the community or residential preferences of people in a more accurate manner. In this study, since we had found that the black homemakers could not discriminate by population size (e.g., "places of 50,000 to 149,999"), we chose to let general expressions of size and location suffice ("middle-sized city," "in the country, not on a farm," etc.). These did not prove to be very adequate either, when compared to named places where the respondents said they would like to live. Perhaps the matter could be investigated better by asking respondents to name particular places (and developing categories afterward), or asking for some descriptive phrases to be offered by respondents and then developing groupings of these. The problem is probably based on the different values considered by different respondents---none of which is "size" itself. Instead it may be jobs, culture, recreation, or many other aspects that are important, and to ask for size is to seek an indirect measure of the important matters.

In a substantive vein, we confirmed that the tendency of young black women to desire to live in the city still persists, even when they are married (or at least involved in homemaking duties). Since there are fewer young blacks in genuinely rural areas now, the same propensity to move will produce fewer actual movers in the future, at any rate. Our young women in the county seat town were somewhat divergent from the two other young groups. They had an unusual proportion (31.5 percent) expressing a preference for open country residence, and we tentatively interpretted this as a "push" reaction more expressive of the desire to live elsewhere than in the town. Further research should be directed to this question to determine whether they might, in fact, be expressing a new tendency among some young blacks to move to the country rather than the large city. The other possibility is that our tentative explanation is correct, and that research could be directed to the factors that make the town or small city so particularly unattractive to black youth.

On the other hand we found that a considerable proportion of the older homemakers in Houston expressed a wish to live elsewhere than in such a large place: 35.6 percent preferred the town, village or open country options, and an additional 5.5 percent wanted to live in a small city (which surely must mean a desire to move out of the present city). Since these were all homemakers 45 years of age or older we cannot focus on the desire for a better environment for the raising of children, but we do not know just which real desires led to this type of response. Since this might possibly foreshadow (or be an indicator of present) outmigration from the central city by older black women, this dimension deserves careful study.

In short, we have explored the preferences of black homemakers as to where they would like to live, and related these to their age, present residence, past mobility and desire to move. To date we have looked at this descriptively, to see what potential may lie in the present data, and what future study may be suggested. We have yet to attempt more sophisticated statistical analyses structured on the observations reported here.

FOOTNOTES

[1] Kirschenbaum (1971), Beale (1971), and Taeuber (1969) among others, state that the incidence of rural-to-urban migration has decelerated. The former suggests, implicitly, that research should examine the new urban-to-rural migration trends, while the latter explicitly recommends the redirection of inquiry towards the social and economic outlook for blacks who remain in the rural and small town areas of the South.

[2] According to a recently published report from the Texas Urban Development Commission (1971), Texas lost over 100,000 nonwhites through out-migration in the 1940's, 33,000 during the 1950's, and approximately 4,000 during the 1960's. Our own estimates indicate that Texas blacks actually experienced a net increase of some 19,000 by migration during the 1960's (Upham, n.d.).

[3] The population studied in this report was chosen to cover real communities in depth rather than to be representative of black homemakers in any larger geographic setting. Therefore we chose the communities with care and attempted to cover the selected areas exhaustively. In all three nonmetropolitan communities every black household was considered, and of those found to be eligible, approximately 94 percent of the homemakers consented to interviews. In the 80-block section of Houston a 50 percent systematic sample was surveyed. Since we do not propose that our figures are representative of black homemakers elsewhere we have not employed tests of significance and cannot legitimately generalize. We do, however, believe that the broad outlines of our findings would probably be confirmed in representative samples from similar populations.

[4] Price (1969:24) notes that "...cumulative effects of out-migration on Negro females in rural areas of the Secessionist South are almost identical to those of Negro males. Negro females seem to have slightly higher out-migration rates, but the differences have become less in more recent cohorts....the female cohort of 1910 had a much higher rate, perhaps indicative of the greater employment opportunities for females in urban areas as private household workers."

[5] Abu-Lughod and Foley, (1970:468) stipulate that within the first decade of marriage, the family makes approximately two-thirds of its total lifetime moves.

[6] Our colleagues at Texas A&M University, William P. Kuvlesky and John Pelham (1970), conducted a study of 484 high school sophomores of both races and sexes in three nonmetropolitan Texas counties using the same question concerning ideal residential area goal we employed in our study. One of the conclusions was that few youth of any race-sex type desired to live in a small town or on a farm (p. 170). Their findings on black female youth showed that 80 percent wanted to live "in a city," while only 43.2 percent of our nonmetropolitan homemakers under 25 years of age expressed the same preference. Of course, their respondents were all single and around 16 years of age, so the subjects were not particularly operating under the same social interests.

[7] The head of household would, perhaps, be the best indicator of potential family mobility, but in this study we only had access to the homemakers' orientations. As indicated above, a high proportion of the homemakers in our study were also the heads of their households, and could speak with that double weight. However, according to a study by Katona and Mueller (as cited in Abu-Lughod and Foley, 1970), over a two-year period less than half the percentages of renters and owners who earlier had expressed a desire to move actually did move.

[8] The small number of homemakers occupying payment-free housing makes percentage comparisons with the other types of occupants difficult. For that reason, they were combined with renters in Table 10.

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MIGRATION AND OCCUPATIONAL CHANGE IN MISSISSIPPI

A MULTIVARIATE ANALYSIS

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MIGRATION AND OCCUPATIONAL CHANGE IN MISSISSIPPI: A MULTIVARIATE ANALYSIS[1]

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INTRODUCTION

Redistribution of population within the state of Mississippi, as in most parts of the Nation, is largely a consequence of internal migration which is to a great extent a function of mechanization, automation, and technological change. The period between 1950 and 1960 is the decade during which automation and technological changes were developing and flourishing rapidly, and their impacts influenced the social, economic, and political habitat of the American states (Jaffe and Froomkin, 1968).

OBJECTIVE OF PAPER

The basic objective of this paper is to analyze the relation between net migration and occupational change during the period 1950 to 1960. The analysis will be achieved by the application of a theoretical model, developed by the senior author (El Attar, 1970; El Attar and Tarver, 1972), to eight OBEA's (Office of Business Economics Areas) which constitute the whole state of Mississippi and portions of the contiguous state of Alabama, Arkansas, Louisiana, and Tennessee.

DESCRIPTION OF AREAS

The OBEA's are nodal economic areas. They are delineated by the Office of Business Economics of the United States Department of Commerce to provide a spatial dimension to the analysis of the Nation's economic structure (OBE, 1967). In such areas commuting is reduced to a minimum, economic heterogeneity is increased to a maximum, and labor markets tend to be considerably smaller than their corresponding areas. Consequently, commuting indexes are not required for this study since place of work and place of residence are assumed to be within the boundary of each respective OBEA. Table 1 provides a summary of the basic data on each area, including the size and change in civilian employment, net migration of persons under 65 years of age, and number of counties. The areas are portrayed in Figure 1 to provide a schematic presentation of 187 counties of which 82 counties were in the state of Mississippi, and the rest (105) in the aforementioned

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TABLE 1. CIVILIAN EMPLOYMENT, EMPLOYMENT CHANGE, NET MIGRATION OF PERSONS UNDER 65 YEARS OF AGE, AND NUMBER OF COUNTIES IN THE EITHT OBEA'S, INCORPORATING THE STATE OF MISSISSIPPI, 1950-1960[a]

		Employment							No. of Counties		
		1950		1960		Change 1950-1960					
		Number	Pct. of Total	Number	Pct. of Total	Number	Percent	Net Migra-tion	Mississippi	Other States	Total
45.	Birmingham	541,554	22.27	548,517	21.76	6,963	1.29	-220,142	14	14	35
46.	Memphis	538,214	22.13	524,172	20.79	-14,042	-2.61	-269,412	10	28	38
47.	Huntsville	156,578	6.44	178,447	7.08	21,869	13.97	-35,864	2	13	15
134.	Greenville	197,548	8.12	170,192	6.75	-27,356	-13.85	-183,765	12	10	22
135.	Jackson	162,693	6.69	163,333	6.48	640	.39	-67,276	13	-	13
136.	Meridian	139,589	5.74	125,624	4.98	-13,965	-10.00	-88,788	13	3	16
137.	Mobile	169,692	6.98	206,115	8.17	36,423	21.46	8,247	5	7	12
138.	New Orleans	525,887	21.63	604,880	23.99	78,993	15.02	15,442	13	23	36
	Total	2,431,755	100.00	2,521,280	100.00	89,525	3.68	-841,558	82	105	187

[a] See text for sources of data.

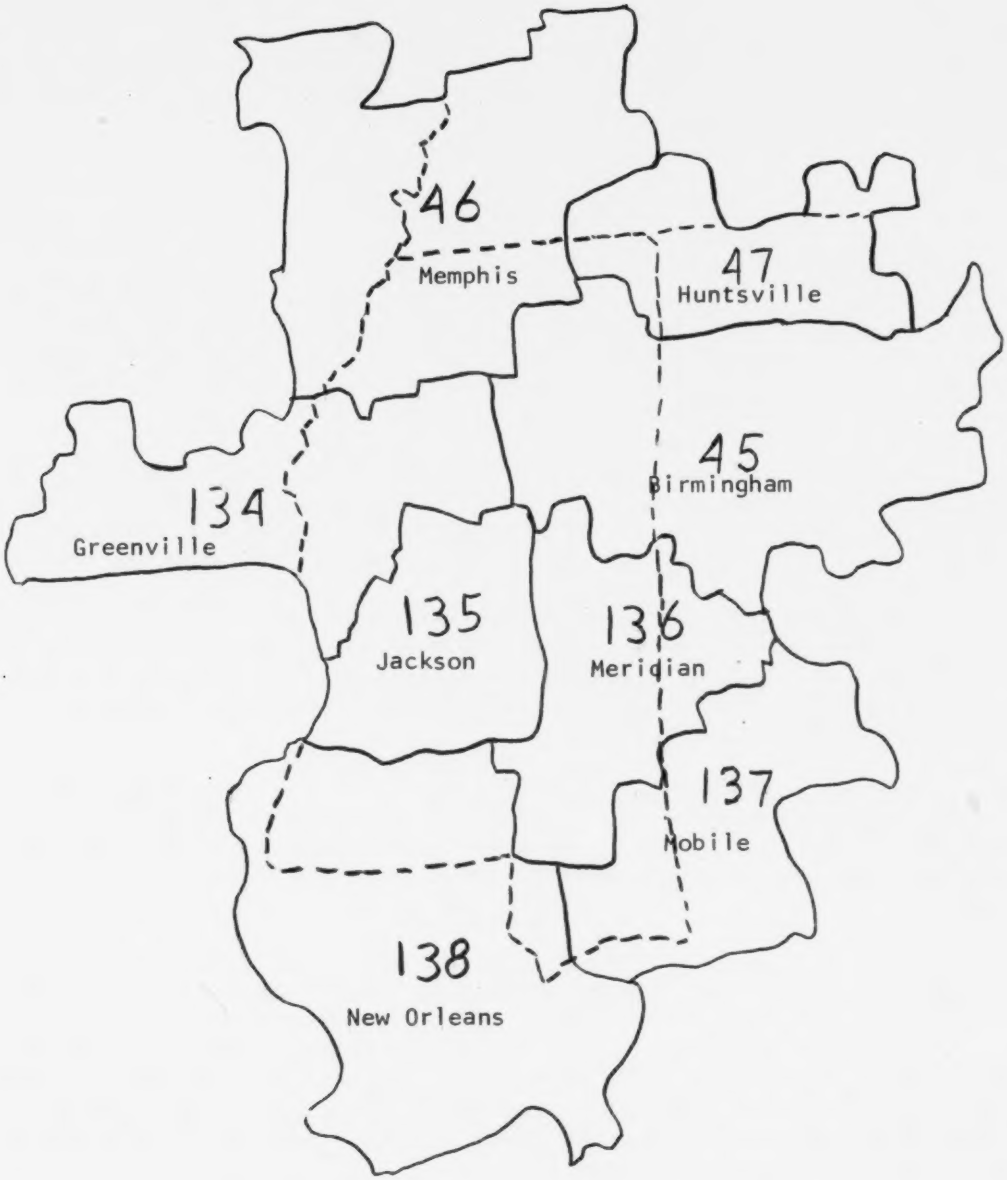
46
Memphis
47
Huntsville
45
Birmingham
134
Greenville
135
Jackson
136
Meridian
137
Mobile
138
New Orleans

Fig. 1.--OBE Economic Areas, Incorporating the State of Mississippi, as delineated by the Regional Economic Division, Office of Business Economics, 1969

45.	Birmingham, Alabama	135.	Jackson, Mississippi
46.	Memphis, Tennessee	136.	Meridian, Mississippi
47.	Huntsville, Alabama	137.	Mobile, Alabama
134.	Greenville, Mississippi	138.	New Orleans, Louisiana

states. The size of civilian employment in all areas in 1960 was over 2.5 millions, which exceeded that of 1950 by roughly 3.7 percent. The eight areas experienced net out-migration of approximately 842 thousand persons during 1950 to 1960. Mobile and New Orleans were the only two areas to gain population through net in-migration.

CONCEPTUAL FRAMEWORK

According to the proposed model the process of migration is conceptualized to be a result of the continuous development and change in automation and technology in the United States. This suggests that the model will use as a basic framework the concepts of mechanization, automation, and technological change. The definition and significance of each of these concepts will be briefly elaborated below.

Mechanization.--The concept of mechanization may be defined as any technological change which substitutes mechanical processes for human or animal labor, increasing thereby the output per worker or man-hour, and reducing the required labor per output unit (Jaffe and Froomkin, 1968).

Automation.--The term automation refers to those forms of technological change which automatically control the operation system, process or apparatus either by mechanical or electronic devices that take the place of human organs of observation, effort, and decision (Bates, 1969; Dunlop, 1962; Jaffe and Froomkin, 1968; Webster, 1968).

Technological change.--This is a term of a broadest denotation. It refers to the alteration in the totality of the means of strategies by which people provide the objects of material culture and other desired end products and services (Bates, 1969; Rezler, 1969; Jaffe and Froomkin, 1968; Webster 1968).

In this study, automation, mechanization, and technological changes are represented by changes in occupational structures of the areas. The immediate product of these three factors is the redivision of labor. Redivision of labor means reclassification of tasks as necessitated by technological development and change, each of which is reassigned to different group or category of persons. Changing technology means the introduction of new industries, the creation of new kinds of jobs which may require new skills, and make obsolescence old ones.

Interrelationship of concepts.--The major task here is to formulate a conceptual statement from which an analytical hypothesis that tests the relationship between technological change and migration can be deduced. One realistic assumption is that geographic mobility will be stimulated by those occupations most affected by technological developments and changes. This assumption has been substantiated by several studies in which professional, technical, and kindred workers showed the highest geographic mobility, especially for long distance migration, and the farmers for short distance (Lively and Taeuber, 1939; Tarver, 1964; Beshers and Nishiura, 1961; Miller, 1966, 1967; Ladinskv, 1967a, 1967b).

In this respect, one can assume that the higher the technological developments and changes in certain occupations relative to others, the greater is the geographic mobility of persons engaged in them. Moreover, one can expect higher migration flows (in and out) in areas most affected by technological changes. Other things being equal, the greater the occupational changes, the greater the migration flows. Consequently, areas with differentiated occupational structures are expected to yield different selective migration patterns.

HYPOTHESIS

In view of the above conceptualization, one can state the hypothesis of this study as follows: Net migration is functionally related to shifts within occupational structures of the areas. Implicit in this hypothesis is the assumption that the changes within these structures contribute differentially to migration.

RESEARCH METHODS

Given below are the sources of data, specification of observational unit, identification of variables, and formulation of statistical model.

Sources of Data

The data were compiled on county basis from the following sources:

Net migration.--County net migration data (the dependent variable) for persons under 65 years of age were obtained from the net migration estimates by Bowles and Tarver (1965). Net migration data for each area are given in Table 1 above.

Occupational changes.--Data for the 1950-1960 occupational changes (the independent variables) were obtained from Tables 43 and 84 of population censuses of 1950 and 1960, respectively (U. S. Bureau of the Census, 1952, 1961). Comparability of occupational data in the two censuses has not been affected by the changes in census techniques. Twelve major occupational groups were utilized in this study. Table 2 gives the number, percent changes, and percent distribution of civilian employment, by major occupational group, in the areas from 1950 to 1960. All areas lost farmers and farm managers, farm laborers and farm foremen, and laborers. The percentage loss in number of "farmers and farm managers" was the highest in the aggregated area of Greenville and Jackson and lowest in the Memphis area. With regard to "farm laborers and farm foremen," the combined areas of Meridian and Mobile had the highest percentage loss and Greenville and Jackson had the lowest.

Observational Unit

The observational unit in this study is the county. There are 187 counties in the eight selected areas. Areas with insufficient number of counties for statistical computations were lumped with other areas for the purpose of maximizing the number of degrees of freedom. The aggregation reduced the number of analytical areas to five, namely, Birmingham and

TABLE 2. CHANGES IN CIVILIAN EMPLOYMENT BY MAJOR OCCUPATIONAL GROUPS OF THE OBEA'S, INCORPORATING THE STATE OF MISSISSIPPI, 1950-1960

Major Occupational Groups	Number Employed		Change in Employment		Pct. Distribution	
	1950	1960	Number	Percent	1950	1960
			Birmingham and Huntsville (45 & 47)			
Prof., etc.	44,327	66,408	22,081	49.81	6.35	9.13
Farmers	128,711	48,457	-80,254	-62.35	18.44	6.67
Mgrs., etc.	47,233	54,089	6,856	14.52	6.77	7.44
Clerks	49,163	75,480	26,317	53.53	7.04	10.38
Sales wkrs.	39,731	47,032	7,301	18.38	5.69	6.47
Craftsmen	77,017	98,026	21,009	27.28	11.03	13.48
Operatives	133,033	154,595	21,562	16.21	19.06	21.27
Pvt. household wkrs.	29,731	38,423	8,692	29.24	4.26	5.29
Service wkrs.	38,996	54,069	15,073	38.65	5.59	7.44
Farm laborers	52,131	22,618	-29,513	-56.61	7.47	3.11
Laborers	49,191	47,297	-1,894	-3.85	7.05	6.51
Not reported	8,868	20,470	11,602	130.83	1.27	2.82
Total	698,132	762,964	28,832	4.13	100.00	100.00
			Memphis (46)			
Prof, etc.	30,667	40,194	9,527	31.07	5.70	7.67
Farmers	131,033	51,746	-79,287	-60.51	24.35	9.87
Mgrs., etc.	36,712	38,799	2,087	5.68	6.82	7.40
Clerks	41,587	55,528	13,941	33.52	7.73	10.59
Sales wkrs.	31,189	35,794	4,605	14.76	5.79	6.83
Craftsmen	49,255	53,022	3,767	7.65	9.15	10.12
Operatives	69,271	95,558	26,287	37.95	12.87	18.23
Pvt. household wkrs.	22,168	30,237	8,069	36.40	4.12	5.77
Service wkrs.	34,336	39,698	5,362	15.62	6.38	7.57
Farm laborers	54,914	37,291	-17,623	32.09	10.20	7.11
Laborers	28,821	27,051	-1,770	-6.14	5.35	5.16
Not reported	8,261	19,254	10,993	133.07	1.53	3.67
Total	538,214	524,172	-14,042	-2.61	100.00	100.00

TABLE 2. Continued

Major Occupational Groups	Number Employed 1950	Number Employed 1960	Change in Employment Number	Change in Employment Percent	Pct. Distribution 1950	Pct. Distribution 1960
Greenville and Jackson (134 & 135)						
Prof., etc.	21,117	28,287	7,170	33.95	5.86	8.48
Farmers	96,998	29,670	-67,328	-69.41	26.93	8.90
Mgrs., etc.	22,786	26,212	3,426	15.04	6.33	7.86
Clerks	21,449	29,917	8,468	39.48	5.95	8.97
Sales wkrs.	17,041	18,226	1,185	6.95	4.73	5.46
Craftsmen	28,320	32,857	4,537	16.02	7.86	9.85
Operatives	41,116	51,363	10,247	24.92	11.41	15.40
Pvt. household wkrs.	18,361	25,498	7,137	38.87	5.10	7.65
Service wkrs.	18,928	24,266	5,338	28.20	5.25	7.28
Farm laborers	44,101	38,531	-5,570	-12.63	12.24	11.55
Laborers	24,725	20,022	-4,703	-19.02	6.86	6.00
Not reported	5,299	8,676	3,377	63.73	1.47	2.60
Total	360,241	333,525	-26,716	-7.42	100.00	100.00
Meridian and Mobile (136 & 137)						
Prof., etc.	20,154	29,533	9,379	46.54	6.52	8.90
Farmers	47,581	18,027	-29,554	-62.11	15.38	5.43
Mgrs., etc.	22,923	28,306	5,383	23.48	7.41	8.53
Clerks	22,713	35,725	13,012	57.29	7.34	10.77
Sales wkrs.	16,441	20,097	3,656	22.24	5.32	6.06
Craftsmen	31,659	44,697	13,038	41.18	10.24	13.47
Operatives	48,112	60,218	12,106	25.16	15.56	18.15
Pvt. household wkrs.	16,495	21,228	4,733	28.69	5.33	6.40
Service wkrs.	19,386	27,433	8,047	41.51	6.27	8.27
Farm laborers	26,854	9,138	-17,716	-65.97	8.68	2.75
Laborers	30,080	28,189	-1,891	-6.29	9.73	8.50
Not reported	6,883	9,148	2,265	32.91	2.23	2.76
Total	309,281	331,739	22,458	7.26	100.00	100.00

TABLE 2. Continued

Major Occupational Groups	Number Employed		Change in Employment		Pct. Distribution	
	1950	1960	Number	Percent	1950	1960
			New Orleans (138)			
Prof., etc.	43,080	63,260	20,180	46.84	8.19	10.46
Farmers	39,014	15,400	-23,614	-60.53	7.42	2.55
Mgrs., etc.	45,795	54,548	8,753	19.11	8.71	9.02
Clerks	59,083	79,036	19,953	33.77	11.23	13.07
Sales wkrs.	33,914	39,559	5,645	16.64	6.45	6.54
Craftsmen	61,642	75,636	13,994	22.70	11.72	12.50
Operatives	82,567	101,739	19,172	23.22	15.70	16.82
Pvt. household wkrs.	24,458	32,252	7,794	31.87	4.65	5.33
Service wkrs.	44,503	56,285	11,782	26.48	8.46	9.31
Farm laborers	32,335	11,017	-21,318	-65.93	6.15	1.82
Laborers	53,233	47,583	-5,650	-10.61	10.12	7.87
Not reported	6,263	28,565	22,302	356.09	1.19	4.72
Total	525,887	604,880	78,993	15.02	100.00	100.00
			Total All Areas			
Prof., etc.	159,345	227,682	68,337	42.89	6.55	9.03
Farmers	443,337	163,300	-280,037	-63.17	18.23	6.48
Mgrs., etc.	175,449	201,954	26,505	15.11	7.22	8.01
Clerks	193,995	275,686	81,691	42.11	7.98	10.93
Sales wkrs.	138,316	160,708	22,392	16.19	5.69	6.37
Craftsmen	247,893	304,238	56,345	22.73	10.19	12.07
Operatives	374,099	463,473	89,374	23.89	15.38	18.38
Pvt. household wkrs.	111,213	147,638	36,425	32.75	4.57	5.86
Service wkrs.	156,149	201,751	45,602	29.20	6.42	8.00
Farm laborers	210,335	118,595	-91,740	-43.62	8.65	4.70
Laborers	186,050	170,142	-15,908	-8.55	7.65	6.75
Not reported	35,574	86,113	50,539	142.07	1.46	3.42
Total	2,431,755	2,521,280	89,525	3.68	100.00	100.00

Huntsville, Memphis, Greenville and Jackson, Meridian and Mobile, and New Orleans.

Identification of Variables

The variables among which the various hypothesized relationships are to be measured and analyzed are symbolized as follows:

Dependent Variable:

M_{ik} = estimate of the net migration of persons under 65 years of age, 1950-1960, of the ith county in the kth area; $i = 1, \ldots, n_a$, where n_a is total number of counties in the kth area.

Independent Variable:

X_{ijk} = occupational change of the jth occupational group in the ith county of the kth area, 1950-1960; $j = 1, \ldots, 12$.

The Statistical Model

The relation between net migration and occupational change is assumed to be a functional, linear relationship. Accordingly, the utilized statistical model may be specified as follows:

$$M_{ik} = B_o + B_j X_{ijk} + e_{ik}$$

where M_{ik} and X_{ijk} are defined above. In this case, there are j + 2 parameters: $B_o, B_1, \ldots, B_j$, and σ^2. Determination of the Beta coefficients is one of the objectives of this research. The parameter B_o is the migration value when the values of all regression factors equal zero. The other coefficients, B_j, imply the change in M_{ik} per unit change in the corresponding independent variable. In the case of this study, if B_o and B_j ($j = 2,3, \ldots, 12$) = zero, and $B_1 = 1$, the model then becomes: $M_{ik} = X_{i1k} + e_{ik}$. This means, for example, that with each gain or loss of one employee caused by occupational change, net migration also increases or decreases one unit plus (or minus) error.

In regard to the statistical method, the stepwise regression is a suitable technique for this research. This statistical technique shows those independent variables which account for the most variation in the dependent variable by order of entry of each independent variable. The computations were preformed by means of the BMD computer programs (Dixon, 1968).

ANALYSIS OF FINDINGS

Table 3 presents the cumulative R^2, the coefficients of regression and intercept, and the partial and simple correlation coefficients of net migration of persons under 65 years of age and changes in the occupational structures of civilian employment in the OBEA's under study. The basic characteristic of the stepwise technique is reflected in the patterns of the arrangements of the independent variables (occupational groups) of the five analytical areas.

TABLE 3. CUMULATIVE R^2, REGRESSION COEFFICIENTS AND THEIR STANDARD ERRORS, AND PARTIAL AND SIMPLE CORRELATIONS BETWEEN NET MIGRATION OF PERSONS UNDER 65 YEARS OF AGE AND OCCUPATIONAL CHANGES IN EIGHT OBEA's INCORPORATING THE STATE OF MISSISSIPPI, 1950-1960

	Coefficients of				
				Correlation	
Occupation and Intercept	Cumulative R^2	Regression and Intercept	Standard Error	Partial	Simple
			Birmingham and Huntsville (45 & 47)		
Craftsmen, etc.	.400	.877	1.787	.080	.633*
Laborers	.586	5.985	2.932	.318	.586*
Farmers	.751	3.393	.813	.566*	-.066
Operatives	.815	3.428	.661	.649*	.531*
Profess., etc.	.886	6.800	1.967	.471*	.128
Serv. wkrs.	.898	-.301	3.510	-.014	-.117
Mgrs., etc.	.902	4.477	3.718	.194	.384*
Pvt. houseld wkrs.	.905	-7.344	3.825	-.301	.503*
Farm laborers	.911	2.145	1.481	.232	-.026
Sales wkrs.	.913	-2.348	5.084	-.076	-.183
Clerks	.914	-.901	2.893	-.051	-.131
Not reported	.914	-.794	2.861	-.046	-.437*
Intercept		-1,090.968			
			Memphis (46)		
Sales wkrs.	.691	14.098	5.143	.481	.831*
Farmers	.905	3.294	.377	.868*	.363*
Farm laborers	.960	2.167	.729	.511*	.157
Craftsmen, etc.	.977	5.786	3.638	.303	.686*
Laborers	.980	4.343	2.956	.282	-.249
Mgrs., etc.	.982	7.064	4.457	.302	.774*
Clerks	.982	-1.660	3.334	-.099	.784*
Operatives	.982	-.680	1.155	-.117	.032
Serv. wkrs.	.983	-1.728	4.136	-.083	.827*
Pvt. Houseld wkrs.	.983	-1.238	4.199	-.059	.667*
Not reported	.983	-.597	1.750	-.068	.789*
Profess., etc.	.983	1.365	5.116	.053	.788*
Intercept		-262.891			

*Significant at the five percent level.

TABLE 3. Continued

	Coefficients of				
Occupation and Intercept	Cumulative R^2	Regression and Intercept	Standard Error	Correlation	
				Partial	Simple
		Greenville and Jackson (135 & 135)			
Farmers	.606	3.735	.214	.966*	.779*
Craftsmen	.953	6.417	2.340	.505	.364*
Mgrs., etc.	.959	-1.152	3.531	-.069	.457*
Laborers	.972	3.956	1.915	.403	-.179
Clerks	.973	5.204	4.216	.254	.463*
Not reported	.978	-5.114	3.393	-.267	.480*
Farm laborers	.980	.875	.468	.371	-.669*
Profess., etc.	.980	2.595	2.474	.218	.460*
Operatives	.981	1.350	1.032	.268	.297
Pvt. houseld wkrs.	.982	-1.621	2.472	-.138	.205
Serv. wkrs.	.982	.694	1.982	.074	.366*
Sales wkrs.	.982	-.656	3.478	-.040	.529*
Intercept		-1,481.749			
		Meridian and Mobile (136 & 137)			
Craftsmen	.815	4.221	1.403	.613	.903*
Farmers	.954	3.847	.797	.780*	.645*
Laborers	.960	1.794	1.876	.240	.582*
Not reported	.969	4.614	3.667	.309	-.036
Sales wkrs.	.976	10.852	7.664	.343	.869*
Pvt. houseld wkrs.	.986	-16.354	4.634	-.674	.784*
Operatives	.987	1.156	1.819	.162	.777*
Farm laborers	.987	.827	.943	.221	.478*
Clerks	.988	3.122	3.155	.248	.828*
Profess., etc.	.988	-3.016	7.800	-.099	.842*
Mgrs., etc.	.988	-1.109	3.603	-.079	.830*
Serv. wkrs.	.988	-.029	7.953	-.001	.859*
Intercept		113.532			

*Significant at the five percent level.

TABLE 3. Continued

Occupation and Intercept	Coefficients of Cumulative R^2	Regression and Intercept	Standard Error	Correlation Partial	Simple
		New Orleans (38)			
Craftsmen	.949	6.422	.976	.808*	.974*
Farm laborers	.985	2.434	.422	.769*	.216
Sales wkrs.	.991	8.061	1.799	.683*	.973*
Farmers	.994	2.620	.354	.839*	.255
Laborers	.996	2.239	.883	.468	.574*
Serv. wkrs.	.998	5.024	1.538	.563*	.728*
Pvt. houseld wkrs.	.998	-3.246	1.643	-.381	.689*
Profess., etc.	.998	2.400	.316	.116	.493*
Mgrs., etc.	.998	-3.620	2.081	-.341	.951*
Not reported	.998	-1.535	1.052	-.291	-.346*
Operatives	.998	.921	.834	.224	.843*
Clerks	.998	.646	1.737	.077	.799*
Intercept		-536.140			
		Total All Areas			
Craftsmen	.626	4.537	.621	.484*	.791*
Farmers	.782	3.972	.150	.896*	.412*
Pvt. houseld wkrs.	.832	4.216	1.073	.286*	.535*
Laborers	.863	5.722	.774	.489*	.354*
Sales wkrs.	.899	12.972	1.439	.564*	.696*
Farm laborers	.911	2.125	.269	.514*	-.018
Operatives	.927	1.240	.314	.287*	.477*
Not reported	.932	.976	.311	.232	-.046
Clerks	.944	-5.457	.891	-.421*	.439*
Profess., etc.	.955	4.122	.701	.407*	.485*
Serv. wkrs.	.957	-4.107	1.106	-.271*	.524*
Mgrs., etc.	.958	2.204	.936	.176*	.790*
Intercept		-55.139			

*Significant at the five percent level.

Differentiation among and within areas in the arrangement of the occupational groups and the magnitude and signs of the regression coefficients support the stated hypothesis. Specifically, changes in the occupational structure have contributed differentially to migration in the different areas. As an example, craftsmen, foremen, and kindred workers was the first variable of importance in three analytical areas -- Birmingham and Huntsville, Meridian and Mobile, and New Orleans as well as the total of all areas. Change of employment in this occupational group accounted for 40, 82, 95 and 63 percent, respectively, of the variation of net migration in the four analytical areas. The importance of this occupational group is also obvious in the zero-order correlation between changes in the number of craftsmen, foremen, and kindred workers and net migration. The significance of this occupational group was of the second order in Greenville and Jackson, and fourth order in Memphis.

Two other occupational groups that were first in importance were sales workers in Memphis, and farmers and farm managers in Greenville and Jackson. The coefficients of multiple determination (R^2) ranged between .91 in Birmingham and Huntsville and unity in New Orleans. This level of R^2 is high which implies the success of the regression model in explaining the variation between the variables involved. These high R^2's are not caused by "saturation," but investigation of the zero-order correlation matrices indicates the existence of multicollinearity (linear relations among the independent variables). For example, there are high zero-order correlations between change in the occupational group of "professional, technical, and kindred workers" and changes in the following major occupational groups: managers, officials, and proprietors; clerical and kindred workers; sales workers; craftsmen, foremen, and kindred workers; operatives; farm laborers; private household workers; and service workers. The relationship is direct in all areas. This means that the amount of variation in migration explained by any independent variable will depend on the magnitude and direction of the relationship between the independent variables and the dependent variable. Thus, if the relationship between the independent variables is positive, and both relate to the dependent variable in the same way, the computed effects of these independent variables will be higher than their real effects. If the relationship is negative, the computed effects will be less than the true effects (Andrews, et al, 1969). These generalizations are supported by the partial correlation coefficients (Table 3). In estimating migration, however, this multicollinearity is apt to reduce the number of predictors in the model, and as such it is desirable.

All variables in each of the analytical areas and total of all areas have stepwise-regression coefficients significantly different from zero at the five percent level. The signs of these coefficients reveal differentiated relations between changes in occupational structure and migration (Table 3). Only the analytical area of Meridian and Mobile has a positive intercept which implies net migration gains when the change in each occupational group is zero. According to this interpretation, this area would have gained 114 net migrants had the change of each occupational group been zero.

SUMMARY AND CONCLUSION

In this paper, a multivariate analysis for the relationship between migration of persons under 65 years of age and changes in occupational structure between 1950 and 1960 in eight OBEA's that in part constituted the state of Mississippi was established The main objective was to test the hypothesis that net migration is a function of changes in the occupational structure, and that these structural changes contribute differentially to migration in each area. The findings of the study supported the hypothesis. The stepwise regression model accounted for a significant proportion of the variability in the 1950-1960 net migration, ranging from 91 percent in Birmingham and Huntsville to 100 percent in New Orleans. This high predictive value is principally related to multicollinearity, which is desirable in reducing the number of predictors in the prediction process.

The scientific value of the present paper lies in the fact that it dealt with migration on a micro basis by using OBEA's. As such, this research will add to the understanding of labor mobility in its response to changes within the occupational structure and will refine our present knowledge of individual characteristics of migrants.

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HEALTH CARE IN RURAL AREAS*

The principal characteristic of change in U.S. population since World War I has been urbanization. Urban growth from migration and natural increase has gone on apace. The rural sector has become predominantly non-farm.

Today's farmer produces enough food for his family and about 50 other persons. As a result, although the rural population has remained about the same level, 54 million, for the past five decades, the farm population has become a steadily smaller proportion of it. Three-fifths of the rural population was composed of farm people in 1920; by 1970 the portion was only one-fifth. Decline in agricultural employment has accounted for continuing outmigration of the farm population. About 1,350 counties had such heavy outmigration during the 1960's that they declined in population.

The Rural Health Situation

The rural regions of all countries suffer in comparison to their urban areas in terms of access to health care. Probably this is due to two basic factors: (1) a relative lack of wealth, and (2) a nonconcentrated population. The attractions for most physicians to locate voluntarily in rural areas are few; the economic resources to provide the necessary facilities, equipment, and services are in short supply; and the familiar and customary patterns for organizing the more highly specialized medical care modalities do not usually suit the low concentration of population. Complicating this is the lower level of educational status of most rural populations resulting in a scarcity of trained leadership talent.

We find that rural people in the more sparsely populated areas have only about one-half the access to physicians, nurses, dentists, hospital beds, and other health resources when compared with the rest of the Nation. The health problems of rural areas are further compounded by environmental hazards, an aging population, and a high degree of poverty. One person out of four is poor in rural districts; in the cities, one out of eight; and in the suburbs, one out of 15. About 3 million poor families live in rural areas, plus another million that are migratory or unattached to any settled rural areas.

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*Presented by Bond L. Bible, PhD, Director, AMA Department of Rural Health, for the Rural Sociology Section, Association of Southern Agricultural Workers Annual Meeting, Atlanta, February 5-7, 1973.

Rural Health Care Systems

The two most basic health care problems of rural areas are medical manpower and organization of services; the most acute needs are for more primary physicians and for more systemization of primary medical practice. Solving either of these would aid in accomplishing solution of the other. Adequate manpower enables the task of systemization to go further than it otherwise could, and systemization of practice can make recruitment and retention of physician manpower easier to accomplish. Of the various methods considered for geographical redistribution of medical manpower to rural areas, the two that may hold the greatest promise are indirect conscription through the National Health Service Corps and recruitment of physicians to organized systems. These two are particularly supportive of a systemization of primary medical practice strategy.

It is certain that many small communities that once had their "own" physician will never again have one of their own. It has become clear that, for some rural areas, solutions completely different from the traditional "physician in residence" must be sought. In such areas, emphasis may be needed on expanded transportation and communication capabilities, part-time use of physicians and allied health workers, improved bio-monitoring technology, use of new physician support occupations, better understanding of individual health practices, and development of emergency care and self-help methods to ensure rural health coverage.

Multiple communities in a logical service area will need to plan together to develop health care systems on an area basis to attract appropriate health manpower working in a group to provide home, clinic, and hospital care. Planning for health services on an area basis makes it necessary to think in terms of time rather than distance. Planning must also recognize divergent needs for services requiring new types of health workers, technology, and emergency care practices.

Health planners in the United States have tended to treat resources and services as separate areas of concern and analysis. Numbers of hospital beds and numbers of trained health manpower of every category are usually analyzed under the heading of resources, while organized home health care, emergency rooms, laboratory services, public health programs, intensive care units, etc. are each considered service components of the community services system. The planning agency can inventory each of the many personal health services impacting on the community under the primary medical care level. At this point health planners have preferred simply to count the numbers of physicians of various specialty types and enter this tally in the "resources" column. The extent and character of organized practice is assumed either to be uncountable or unimportant. However, the actual and potential differences between medical manpower in a well organized program and medical manpower in independent practice can be highly significant for the community health services system. This is particularly so in rural areas where medical manpower working outside an organized system is likely to be: (1) less stable, (2) more difficult to recruit, and (3) of less certain quality. There is, in addition, much less potential for building onto the practice the additional primary care service components which may be needed by the community. Where systemization of medical practice has occurred in rural areas, the potential for enhancing quality, stability, and comprehensiveness has been enhanced.

Basic to the development of rural health systems is the initial planning by rural communities. It must be regional in scope, based on economic service areas. It must involve all segments of the community, provider and consumer alike, with support of planning agencies and government at the county, state, and federal levels. It must be elastic and tailored to the geography and the potential resources of the locality. Hopefully, the plans will always provide a "one door" service for all economic levels rather than serving the middle class or becoming an indigent clinic serving only the poor.

We must emphasize that there is no one, simplistic solution applicable to all medically deprived rural locales; rather, each area will need to develop its own plan, incorporating those approaches most appropriate to their particular needs. Of prime importance is coordination of planning. There is an urgent need for system development with physician and hospital linkages.

In applying the community systems approach to the delivery of health services, a real problem of concern is seen to be not simply health care or medical organization within the community, but rather community organization for health care in the context of the total community with all its objectives and problems.

Educating rural community leaders to the potential of rural development, including planning for readily available and accessible health services, can play a significant part in improving the quality of country living.

Elements of a Model

I should like to enumerate some elements of an ideal rural health system.

I. Personnel.

A. Two or more physicians representing primary physician skills; e.g., family practitioner, internist, pediatrician.
B. Nurse, dentist, laboratory and x-ray technicians.
C. Health aides -- recruited from local community.
D. Physician's assistant and/or nurse practitioner.
E. Public health nurse -- outreach and follow-up.
F. Social worker.
G. Administrator and staff
H. Medical specialties, staff, visiting or by referral.

II. Services - one door for all economic levels.

A. Preventive, curative and rehabilitative -- medical and dental.
B. Social services.
C. Transportation -- to and from clinic and to referral resources.

D. Outreach case finding.
E. Home care
F. Appropriate technology.
G. Health education.
H. Satellite clinics.
I. Administration.
J. Evaluation and medical audit.
K. Central records, master family records, established referral, and report back procedures.
L. Adequate physical facilities.

III. Community relationships

A. Health council representing total community.
B. Community college for training aides.
C. Medical schools for referral and source of students and residents.
D. County health department.
E. Medical society.
F. Health planning agencies.

IV. Funding -- multiple method approach.

Once again it should be emphasized that, from the above elements of a complete rural health system, each rural area would have to pick those elements appropriate to its own needs after adequate planning. I do believe, however, that all or most of the aspects of the above health system are feasible except in the more isolated rural areas.

Some Mechanisms Being Tried

Considerable study is underway to develop methods for alleviating the maldistribution of physician manpower. It is difficult to recommend any one particular approach since what is appropriate for one locale may not be ideal for another. Some of the mechanisms being suggested include: forgiveness of student loans; tuition subsidies; practice grants; tax exemptions or other financial inducements in return for service in underserved areas; community development of medical facilities and guarantees to physicians; government-sponsored community health centers; special efforts to recruit medical and other health students from underserved areas; the decentralization of undergraduate and graduate medical education through rural preceptorships and greater use of community hospitals for intern and resident training; creation of a special corps of health professionals under government aegis; and special legislation providing exemption from military obligation in return for service in an underserved area.

Numerous experimental models for rural health care services have been developed in this country, and many more are in the planning stages. Several medical schools have initiated rural health services and in some locations have utilized medical and nursing students in helping to provide health care under the supervision of physicians.

The utilization of modern technology in medical care, innovative developments initiated by medical groups in forming health care delivery systems, and involvement of allied health personnel such as nurse practitioners, physician's assistants, MEDEX, and health aides have become a part of a number of models for health care delivery.

Some Directions Ahead

The systems approach for primary medical practice in rural areas should be encouraged and developed. Geographic access to primary care is needed in areas where no service is available or where distances are too great to a medical center. Primary care systems functioning in rural areas can be improved by increasing productivity, increasing the scope of services, and increasing stability and quality.

The development of new practice by extending the present services can be done with relative ease. There is a built-in stability and an established tie to a larger system. Some financial assistance or input is necessary to cover the development and start-up costs to the existing medical care resource in extending primary care to a rural location within a reasonable distance. Generally, this distance would be between 20 and 60 miles. The approach indicated here is the satellite clinic staffed by physicians and/or allied health professionals either on a permanent full-time or periodic basis depending on the situation. Such a clinic would usually involve not more than two full-time equivalent physicians for its staffing complement. The practice might be operated by an organization based in the community in which it is located, or directly by the extending resource. In either case there should be a firm intent on the part of the major medical care resource that the geographic extension is to be permanent rather than an experiment. The most likely types of medical care resources that can readily extend primary care are teaching medical centers, hospitals, and group practice organizations.

Many rural communities with problems of inaccess to primary care are not within reasonable geographic proximity of an existing medical care resource that can or would be willing, given the appropriate incentives, to extend primary care geographically. In such cases, it will be necessary to develop new independent primary care programs and attempt later to build the linkages with larger backup medical care resources.

New primary care practice programs will need to have physician leadership, management capability through an experienced health care administrator, community organization to form a corporation containing broad representation of all groups in the community to be accountable for ownership and policy guidance of the program, and linkage to a source of medical professional backup.

The new practice development relies both on a local community organization and on physician leadership.

Consumer Health Education

The greatest untapped manpower resource in this country is the individual consumer. Needed is an informed and "activated" citizen who can take his own initiative in personal health -- approaching and utilizing the health care system properly for all services required in his personal health management program.

An important and promising avenue for encouraging this appropriate, active response is through a broader program of consumer health education.

University Extension, both cooperative and general, has demonstrated its effectiveness in some areas which contribute to better health -- including nutrition, sanitation, homemaking, and pest control. Extension has not been involved directly in issues of health care delivery or access to the system, because it was deemed that this was the exclusive domain of the formal health care delivery system.

Plans are being implemented for selected land-grant universities to set up proposals for designing programs in consumer health education which can be used by extension divisions and health science centers of university land-grant institutions to demonstrate the following:

(1) Greater concern for personal health.

(2) Positive steps to prevent illness occurrence; to prevent progression of minor illnesses; and to prevent dependency through rehabilitation following catastrophic illness.

(3) A better understanding of the changing health delivery system and how to obtain access to it most effectively and efficiently.

(4) How and what one may accomplish by self-help without or prior to calling on the formal health care delivery system.

Future Trends

The search for rural health manpower must generally be geared to an area-wide health care system. Nowhere can this be done better than in the small towns with which we are most concerned. They can identify their own nurses, active or retired, technicians, teachers who have health skills, or others who can be trained to perform relatively simple, but nonetheless critical, services. A nurse with special training or other specifically trained assistants can relieve the physician of many time-consuming professional activities and allow him to use his professional skills much more productively. The focus in these endeavors is on community consciousness. The greatest investments will be in deliberate planning based on a belief in the rights of all citizens to have access to good health care. With modest expenditure, small communities can establish efficient emergency care through the use of everything from a pool of private automobiles to well-equipped ambulance or (with greater expense) helicopters.

With the development of rural health care delivery systems geared to an area-wide arrangement, with increased utilization of allied health professionals to support rural physicians, with rural community-wide health planning and organization of health services, and with a continuing education program for rural people directed to preventive measures and personal responsibility for health care, progress can and will be made.

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FARM ACCIDENTS AND THEIR VICTIMS:
A STUDY IN LOUISIANA

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Introduction

It is paradoxical that agriculture has become a highly mechanized and technologically oriented industry and yet continues to be characterized by exceedingly low safety standards. Agriculture, today, ranks third among all industries in accidental death rates, only falling behind the high risk occupations of mining and construction. There were 2,400 accidental work deaths in agriculture in the United States in 1970 out of a total of 14,200 accidental deaths in all industries. In addition, farm work accidents also accounted for 200,000 disabling injuries.[1] Accidents to farm residents occur at an even higher rate than work accidents alone. There were 6,700 deaths to farm residents and 580,000 disabling injuries in 1970.[2] The above cited statistics indicate the high economic and social costs of farm accidents. In this regard, it is interesting to note that studies done in Ohio, Michigan, and New York have determined that 59 percent of the accidental work injuries to farm family members result in two or more days lost from usual activities.[3] It is in the context of the rate and costs of farm accidents that the study reported in this paper should be contemplated.

Objectives and Methodological Procedures

The study done was designed to determine the farm accident characteristics of persons working and/or living on farm in Louisiana. Specific objectives were: (1) to provide up-to-date information on farm accidents; (2) to provide a base for comparison of farm accidents in Louisiana with those in other states; (3) to contribute to the National Safety Council's program to standardize farm accident reporting procedures over the nation, and (4) to contribute to the overall programs of the state and nation to improve the well-being of citizens.

Twenty-five of Louisiana's 64 parishes, chosen at random, comprised the sample frame for this survey. These parishes (counties) were located in the six type of farming areas within the state. The sampling unit was the individual farm, represented by the head of the farm household. The final sample included 1,561 farms.

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[1] National Safety Council, Accident Facts, 1971, p. 85.

[2] Ibid., p. 85.

[3] Ibid., p. 86.

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Two key definitions were employed in the conduct of the study at the request of the National Safety Council: (1) a farm was defined as a place where $250 or more in agricultural products were sold annually or a place where at least $50 or more in agricultural products were sold annually and the size of the holding was 10 or more acres; (2) an accident was defined as injury to any person living or working on a farm, or a visitor who was injured while visiting the farm, that required professional medical care or the loss of one-half day or more from usual activities (work, school, play, etc.).

The questionnaire used in the study was designed for use by nonprofessional interviewers. This was necessary since members of parish Home Demonstration Clubs voluntarily served as interviewers. Four separate interview forms were developed. The first form was designed to produce demographic, economic, and attitudinal data on the farm owner or operator, his family, and his employees. It was administered only once--at the beginning of the survey period. Subsequent interview sessions conducted at three-month intervals were concerned only with accident data. The second form, the accident report form, was used to gather information on all accidents regardless of type. In addition to a general accident form, two short supplemental forms were prepared. The latter were for the purpose of collecting information on two specific types of accidents--those involving tractors and those involving any one of seven types of chemicals.

The question item format in all four forms was predominantly of the forced-choice or check-block type. Open-end queries were used only where absolutely necessary. In this manner the information reporting was kept as uniform as possible throughout the state.

Characteristics of Farm Accidents

Number and Severity of Accidents

One hundred eighty-two accidents were reported to have occurred from January 1, 1970 to December 31, 1970 on the farms in the sample population monitored. Accidents were classified according to the seriousness of the injury as follows: (1) a fatal accident; (2) a permanent injury, referring to loss of an eye or limb, paralysis, or other disability which permanently restricted activities; (3) a severe injury, including such things as a broken leg, cut ligament, or sprained back, and (4) a slight injury, such as minor cuts, sprains, burns, or bruises.

The great preponderance of all farm accidents reported fell in the "slight" category, i.e., they involved such injuries as minor cuts, bruises, abrasions, etc.. These injuries accounted for 71 percent of all injuries reported. It should be remembered, however, that for an accident to be reported at all it must have required professional medical assistance or caused the loss of at least one-half day of normal activity. Under these criteria even "slight" injuries are important from the standpoint of personal discomfort and suffering as well as from an economic standpoint.

The more serious injuries, as one would expect, occurred less frequently than minor injuries. Nevertheless, such injuries as a broken leg or sprained back made up over one-fourth (26 percent) of the injuries reported. It is most encouraging that only about two percent of all injuries were permanent and only one percent resulted in a fatality.

The distribution of accidents by severity class was not unanticipated. The percentage distribution of farm accidents by seriousness of injury was much the same in a similar study done earlier in Michigan.[4] In the Michigan study, 66 percent of all injuries were considered slight injuries, 30 percent were judged severe, four percent were classed as permanent, and one percent were recorded as fatal.

Work Conditions Under Which Accidents Occurred

Approximately 59 percent of all farm accidents reported in this study occurred while the individual involved was performing farm work (farm-related activities such as tilling, plowing, harvesting, milking, or repair jobs). The remainder of the accidents did not involve farm work directly, although the activity usually was common around farms.

When males and females involved in accidents were compared, it was found that the sexes were almost diametrically opposed in the work conditions under which their accidents occurred. Sixty-five percent of all accidents involving males occurred while the individual was performing farm work; by contrast, 69 percent of all accidents involving females occurred while the individual was engaged in non-farm work. These differences are accounted for in terms of the work roles of men and women.

The effects of exposure to specific hazards are evidenced in the distribution of accidents according to the machine or other factor involved (Table 1). The percentage of men suffering farm accidents involving machinery was nearly twice as high as the percentage of females having accidents with farm machinery. This, of course, was not unexpected in that men use farm machinery more frequently. However, it is interesting that women had a higher percentage of power tool accidents than men. This may indicate a lack of skill in handling drills, saws, etc..

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[4] Michigan State University, Rural Manpower Center Report No. 14, East Lansing, Michigan, November, 1968.

TABLE 1. Factors Contributing to Farm Accidents by Sex of Respondents*

Factor	Male		Female		Total
	No.	%	No.	%	
Power tool	11	(8)	5	(14)	16
Hand tool	11	(8)	0	(0)	11
Farm machinery	48	(33)	6	(17)	54
General item	59	(40)	21	(58)	80
Animal	17	(11)	4	(11)	21
Total	146	(100)	36	(100)	182

*Percentages are within sex categories.

Men and women were both highly susceptible to "general item" accidents, although here again women predominated--40 percent of the accidents for males and 58 percent for females were of this type. The classification "general item" is a broad one as used here and this accounts in part for the high incident rate in that category. The majority of slips and falls and of accidents occurring in the home which did not involve characteristics suitable for other classifications were included as "general" in nature. Approximately four out of 10 accidents in the "general item" classification were slips and falls.

Place Where Accidents Occurred

Farm fields, homeyards, and barnyards proved to be the most likely places for accidents in the farm complex of Louisiana. Nearly 60 percent (59.8) of all accidents recorded during the course of the field work occurred in one of these three locations. The high number of field accidents (55) is in accordance with the high number of farm machinery accidents reported and presented in Table 1. Accidents in barnyards, where most farm machinery is also operated, accounted for 14 percent of all reported accidents. Many accidents occurred near the home and farm buildings. The homeyard was the scene of 15 percent of the accidents, while 11 percent of the accidents occurred in the home itself and about 10 percent in farm buildings.

Types of Injuries Sustained in Accidents

It was found that the parts of the body most frequently injured in farm accidents were the leg, the head, and the foot. Thirty-one of the 182 accidents reported involved an injury to the leg; 25 involved an injury to the head, and 24 an injury to the foot. Finger, hand, arm, and trunk accidents were also quite common. Toe and eye accidents occurred less frequently, but often enough to suggest safety precautions. "Other" accidents, composed primarily of accidents that affected two or more parts of the body, or could not readily be considered as belonging in one of the other nine classifications, were experienced in 29 instances.

Characteristics of Accident Victims

Accident rates were calculated (1) according to a person's relationship to the farm operator, and (2) according to whether or not the person worked on a farm. The guiding assumption was that different roles on the farm involve different kinds of exposure to the risk of accidents within the general farm environment. For some persons the farm is primarily a workplace, but for wives it may well be more the site of living space including a kitchen, etc., and for children it may be a playground in addition to a place to eat and sleep.

Accident rates for persons grouped by their relationship to the farm operator and by their farm employment status are shown in Table 2, where rates are expressed as the number of accidents per 1,000 persons in the appropriate group.

The procedure followed in collecting data for the calculation of rates worked well for members of the farm family, but not for farm workers. The population counted in the initial interview included those farm workers on the farm at that date, but many accidents occurred to temporary workers later in the year and no count was made of this shifting population. A relatively large number of accidents, 56 of 182, occurred to farm workers and it is probable that the rate of accidents was high for that group, but the rate cannot be precisely calculated because the population at risk cannot be estimated closely.

If accidents to workers are excluded there was an overall accident rate of 25 per 1,000 persons (Table 2). Farm operators exceeded the average with a rate of 30 per 1,000. On the other hand, the accident rate for wives varied greatly according to whether or not they worked on the farm. Those wives working on the farm had an accident rate equal to that of the farm operators. Those not engaged in farm work had an extremely low accident rate of only six per 1,000. The same kind of difference was evident for sons and daughters within the farm family. Sons had a very high rate of accidents compared with that of daughters, and within each group, those who worked on the farm had much higher accident rates than those who did not work on the farm. The high accident rate for farm-working sons is approached only by the miscellaneous group of other farm residents, not family members. Other family members, mainly parents of the farm operator and grandchildren, had a low accident rate.

TABLE 2. Accident Rates by Relationship of Farm Population to Farm Operator and Farm Employment Status [1]

Relationship to farm operator Farm employment status	Farm population	Number of accidents reported	Accident rate per 1,000 population
Farm operator	1,561	47	30
All wives	1,275	18	14
Wives working on farm	437	13	30
Wives not working on farm	838	5	6
All sons	1,100	43	39
Sons working on farm	575	29	50
Sons not working on farm	525	14	27
All daughters	824	10	12
Daughters working on farm	232	5	22
Daughters not working on farm	592	5	8
Other relatives**	277	4	14
Other farm residents Not related to Farm Operator**	81	4	49
Total farm residents	5,118	126	25
Unrelated farm workers*	(396)	56	-

*Calculation of rates inappropriate--see text, p.

**The number of accidents was not sufficiently large to further subdivide rates by whether or not the person worked on the farm.

[1] Statistical tests of significance have not been pursued because it was felt that, given the accident frequency and sample size, there was a greater danger of rejecting substantively interesting differences than of accepting as important those differences that might be simply due to sampling error. Rather low number of accidents, 182, is involved and because of this the rates for particular groups might be somewhat unstable and likely to vary a little from year to year.

The pattern of accident rates suggests the importance of recognizing variations in the farm environment. It is evident that the farm as a workplace involves quite different and greater risks from those arising in the course of its use as a mere residence. Similarly it is evident that children are exposed differentially to farm work by sex. The large difference in rates when sons and daughters are compared suggests that sons are involved in work tasks not assigned to daughters. However, the large difference between children not involved in farm work implies an even broader differentiation in exposure to accidents by roles associated with sex.

This division of the sample by relationship to the farm operator and farm employment status also results in differences by age, educational attainment and work experience. The very low numbers of accidents experienced by some of the groups prevent more detailed analysis by such characteristics as age and education. Daughters, wives not working on the farm, other relatives, and other residents, all had very low accident frequencies. Consequently, more detailed description of characteristics is confined to the farm operators, sons, and farm-working wives.

Accident Rates by Exposure to Farming

It would be desirable to calculate all accident rates involving farm work in terms of relative exposure to farming (or number of hours spent in farm work over the year of the study). For example, it is probable that the fewer accidents to grandparents reflect in part the fewer hours spent by them in farming, as compared with farm operators. However, with the data available, the effect of exposure can be assessed only for farm operators.

There were 1,561 farm operators in the sample and this group suffered 47 accidents during the year under study. One hundred of these farm operators were female and they experienced three of the 47 accidents. The farm operators were a varied group in terms of exposure to farming. Five hundred sixty-two of the operators worked outside agriculture, as well as in farming, and had an accident rate of 27 per 1,000. The 999 operators who worked only on the farm had a higher rate, 32 per 1,000 (Table 3). It is also evident, in Table 3, that for each farm operator group the accident rate increases with the extent of exposure to farm work. For operators involved only in farming, the rate rises from 17 per 1,000 for less than 2,000 hours spent in agriculture over a year, to 51 per 1,000 for over 3,000 hours devoted to farming activity. A similar increase is apparent for farm operators who hold a job outside farming. However, having two or more occupations is associated with a considerably higher accident rate in terms of farm exposure. For those farmers working outside agriculture fewer hours of farming are needed to accumulate an accident rate equivalent to that of full-time farmers. Thus, overall, those who work outside farming have a lower average accident rate than the group of operators who work only in agriculture. Yet,

TABLE 3. Accident Rates for Farm Operators by Exposure to Farming

Hours Spent Per Year at Farming	Sample Population	Number of Accidents Reported	Accident Rate per 1,000 Population*
-----------Farm Operators Working Only in Farming------------			
0-1,999	349	6	17
2,000-2,999	356	11	31
3,000 or more	294	15	51
0-1,999	349	6	17
2,000 or more	650	26	40
Total	999	32	32
------ Farm Operators Also Working Outside of Farming -------			
0-999	339	6	18
1,000-1,999	145	5	34
2,000 or more	78	4	51
0-1,999	484	11	23
2,000 or more	78	4	51
Total	562	15	27

*Rates calculated with non-responses distributed over categories.

when the degree of exposure to farming is taken into account, the full-time farmers have the lowest rates among the farming classes.

Accident Rates by Age, and Hours Spent Per Week in Farming

Accidents to farm operators followed a distinct pattern according to age (Table 4). The youngest operators, those aged 19 to 29 years, have a very high rate of 56 per 1,000. The accident rate than drops to only 19 per 1,000 at ages 50 to 59, before climbing steeply again in the group aged over 60 years. It is not feasible to examine more than one variable

TABLE 4. Accident Rates for all Farm Operators, Wives and Sons Working on Farm by Age

Age	Sample Population	Number of Accidents Reported	Accident Rate per 1,000 Population
Farm Operators:			
19-29	71	4	56
30-39	219	9	41
40-49	352	9	26
50-59	465	9	19
60 or more	454	16	35
Total	1,561	47	30
Wives Working on Farm:			
20-59	366	6	16
60 or more	71	7	99
Total	437	13	30
Sons Working on Farm:			
0-9	20	5	250
10-19	405	14	35
20-29	109	5	46
30 or more	41	5	122
Total	575	29	50

at a time here, but the apparent impact of old age (beyond 60 years) on the accident rate is undoubtedly understated as the time actually spent on farming begins to decline at this age.

Wives had an accident rate lower than that of farm operators at all ages up to age 59. However, for those wives still working beyond age 60, the accident rate was extremely high--more than twice that of farm operators of the same age. More surprisingly, the number of hours worked in farming in an average week made no difference in the accident experience of wives. The hours worked per average week cannot be cumulated into hours per year exposure because the number of weeks worked was not ascertained except for farm operators.

Among farm-working sons the relationship of age to accidents follows a U-shaped pattern similar to that for farm operators (Table 4). An extremely high rate of accident occurrence is observed among the 0-9 age group, although it should be noted that this rate is based on quite small numbers. The rate then drops sharply before climbing to relatively high levels at ages beyond 30 years.

Among farmer's sons, the pattern of accidents by age is strongly interrelated with the number of hours worked in an average week. As for other family members, very high rates are apparent among sons with the lowest number of hours of work exposure (0-9), followed by a considerable drop at 10 to 39 hours of exposure and an eventual rise at 40 to 60 hours of work per week (Table 5).

The very high variation among accident rates for sons reflects the interaction of age and hours worked per week. Those in the youngest ages and with the least experience in farming were prone to high accident rates. Those aged 10 to 29 had lower accident rates because they had a preponderance of low and part-time exposure. At the same time, they were old enough and experienced enough to avoid the hazards of earlier ages. At age 30 and older, accident rates increased, partly because at these ages exposure to farming increased rapidly.

Accident Rates by Education

It was hypothesized before the data were collected that educational attainment would be negatively associated with accidents. That is, it was thought those with more education would experience fewer accidents, reflecting a greater awareness of hazards. The opposite was found to be true for farm operators (Table 6). The accident rate increased with schooling. Why this was true is subject to speculation. It may be related to variables such as exposure or age. Educational attainment had the expected relationship to accidents among wives, with the accident rate decreasing with additional years of schooling.

The relation of education to accidents among farmer's sons was not computed because of the difficulty of comparing sons at younger ages with minimal education with those sons who had completed or essentially completed their education.

Some brief observations derived from the study serve as a conclusion to the findings reported. First, it is clear that farm accidents occur in a different social and physical environment than is true of other industrially related accidents. For one thing, farm work is likely to involve

TABLE 5. Accident Rates for Wives and Sons Working on Farm by Hours Spent at Farming per Week

Hours Spent at Farming in an Average Week	Sample Population	Number of Accidents Reported	Accident Rate per 1,000 Population*
Wives:			
1-39	235	7	30
40 or more	202	6	30
Total	437	13	30
Sons:			
1-9	123	11	89
10-19	171	4	23
20-39	146	4	27
40-59	95	7	74
60 or more	40	3	75
Total	575	29	50

*Rates calculated with non-respnses distributed over categories.

TABLE 6. Accident Rates for all Farm Operators and Wives Working on Farms by Educational Attainment

Years of Schooling	Sample Population	Number of Accidents Reported	Accident Rate per 1,000 Population*
All Farm Operators:			
Less than attendance at high school (0-8)	633	16	25
Some high school (9-11)	416	13	31
High School graduate	316	11	35
More than high school attendance (13 or over)	196	7	36
Total	1,561	47	30
Wives Working on Farm:			
Less than high school attendance (0-8)	124	6	48
Some high school or more (9 or more)	313	7	22
Total	437	13	30

*Rates calculated with non-responses distributed over categories.

individual rather than corporate entrepreneurship, and is therefore less subject to what might be termed systematic social control. Said another way, safety rules are more likely to be violated because there is no formal sanction, such as imposed by insurance companies, unions, etc., for violation.

Second, farm work is in many instances a family affair, involving wives and children. This obviously represents an additional exposure hazard, since more than one person is a potential victim, and certain of the potential victims have characteristics of inexperience and/or immaturity. Finally, it should be noted that the accident potential on farms is increased by the varied types of activities which are routine. Not only is it necessary to work with machinery, but with chemicals and livestock as well. Each type of activity calls for special types of precautions, and thus compounds the chances of an accident.

All in all, the phenomenon of farm accidents is one which stands in need of considerably more attention from professionals in the social sciences.

A Modest Interdisciplinary Overview of the Farm Labor Problem with Some Suggestions for Future Research Efforts*

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ABSTRACT

It is stated that the United States, given its current social framework, is experiencing in the agricultural sector two simultaneous surpluses which together are referred to as the "farm problem"; these are surpluses of products and of labor--the latter is of concern here. The reasons for there being a farm labor surplus are presented, the primary reasons being relatively rapid adoption of technological innovations, the approximation of a competitive market structure which facilitates a "technological treadmill," and lack of an explicit manpower policy related to agriculture. Given existing social frameworks of the society, removing the excess labor from farming appears to be the only currently viable solution; other measures aimed at improving the conditions of agricultural labor are short-run in nature and will eventually lead to reduction of the labor force. The rationale for reducing the agricultural labor force is developed and critiqued. Whether or not the policy to move manpower out of agriculture is accepted, analysts agree that there is a need for research which focuses specifically on the agricultural labor force. Mobility studies, specifically occupational mobility studies, have served as a useful mechanism through which to perform this research and also to relate agriculture to the larger society, but additional refinements are necessary. The paper is concluded by indicating several refinements and by showing how mobility studies suggest research possibilities related to agricultural manpower; two major possibilities are conceptual clarification and analysis of the heterogeneous quality of the agricultural labor force.

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PREFACE

The objectives of this brief paper are twofold. The early sections of the paper attempt to set forth from the viewpoint of the conventional wisdom a concise overview of the current United States farm problem, singling out for attention the labor aspects of that problem, and to specify the reasons and solution given for the problem. This solution is critiqued from both economic and sociological perspectives. Following this critique, the latter sections of the paper suggest some factors which need to be included in research and policy considerations concerning farm labor.

THE FARM PROBLEMS

The Industrial Revolution begun in the 18th Century and continuing today has produced consequences beyond all imagination. Among the most significant consequences has been the advent of "affluent societies," societies in which for the first time in the history of man the majority of people can lead a life of relative total security as regards obtaining the amenities of life (Veblen, 1899; Galbraith, 1958, 1967; Etzioni, 1968).

It would be an understatement to say that the arrival of such affluent societies has been accompanied by a discontent with, or at least a suspiciousness of, the systems of philosophies, social theories, and moral codes which we have inherited, systems overwhelmingly dominated by themes of scarcity as being the essential condition of life (Galbraith, 1958; Gouldner, 1970; Fulbright, 1970; Bendix, 1970; Taylor, 1968; Riesman, 1964). That there could exist a surplus of the necessities of life was unthinkable to the scholars of the recent past, for example Malthus, Ricardo, J.S. Mill, and others (Heilbroner, 1967). Yet, consider for example, the contemporary United States and one specific, very basic commodity: food. Given the moral, economic, and political framework of the United States, there currently exists in this country an apparent "surplus" of food, indeed, a surplus of agricultural products in general (Hathaway, 1963; Bishop, 1967b; Shepherd, 1963; Samuelson, 1964).[2] Our legacy of scarcity-theme theories are continuing to change to fit the current situations, but in the meantime, these theories provide us with "blinders" to certain neglected areas of the overall societal complex, or at least, have given little guidance in how to approach these problem areas.

The possibility of a surplus of food is astonishing to most people. How can there be a surplus? The answer, shorn of embellishments, is devastatingly simple: agriculture has been effective in incorporating the tools of the Industrial Revolution and, together with the utilization of new technology, this has resulted in a considerably more efficient agricultural operation (Fite and Reese, 1965).

The greater efficiency in agriculture, meaning greater output per unit of input, has resulted in freeing tremendous amounts of the factors of production---land, labor, capital and entrepreneurs---especially labor and capital, from agriculture and supplying them to other sectors of the economy; indeed, this transfer of factors from agricultural to nonagricultural sectors is one of the necessary dynamics in achieving an industrialized society (Heilbroner, 1972, 1963; Galbraith, 1967). This transfer of the factors of production is governed primarily by the rates of return to the various factors; over time, factors are utilized in economic sectors to such an extent that the rate of return to a given factor is adjusted to be approximately the same in all sectors of the economy (Hathaway, 1963; Samuelson, 1964; Shepherd, 1963; Watson, 1963). In agriculture, for example, in general, land and capital have gained rates of return which approximate those for nonagricultural uses of comparable land and capital (Hathaway, 1963; Shepherd, 1963).

But, here in the transfer process, an unexpected problem has been encountered; the transfer of manpower out of agriculture has not occurred fast enough to keep pace with the application of new technology and to adjust the rate of return to agricultural labor so that it is equitable to labor's return in nonagricultural sectors (Hathaway, 1963; Hathaway and Waldo, 1964; Shepherd, 1963; Bishop, 1967a).

In a capsulated, perhaps oversimplified statement, agriculture in the United States can thus be described as being an efficient industry in which there has resulted an excess of manpower and an excess of commodities; again at the risk of oversimplification, these two excesses constitute what is commonly referred to as the "United States farm problem." Each of these excesses, while closely interrelated, is analytically distinguishable and can be studied separately; this paper will concern itself with the manpower aspect of the farm problem.

THE FARM LABOR SURPLUS

The Economic Explanation

As noted, a key feature of the farm problem is the excess manpower remaining in agricultural production. In the simple and restricted terms of economic analysis, this surplus of manpower means that equilibrium between the supply of and demand for agricultural labor is substantially below the returns to labor in nonagricultural pursuits (Hathaway, 1963; Hathaway and Waldo, 1964; Phelps Brown, 1962). And, these relatively low returns to agricultural labor are not merely a recent phenomenon; agricultural manpower as a general category has long ranked among the bottom, if not the bottom-most, in terms of returns (Lianos, 1971; Blau and Duncan, 1967; Taylor, 1968). That the factors of land and capital engaged in agricultural production earn equitable returns relative to nonagricultural uses of these factors bears repeating; in terms of adjusting the supplies of the production factors, or the returns to them, the United States farm problem is a problem primarily concerned with manpower, specifically, excess manpower engaged in agriculture and low rate of return to that manpower.

Why Be Concerned with Farm Labor?

Although there is a surplus of manpower in agriculture, bear in mind that all agricultural manpower constitutes only a small portion of the total labor force, four percent of a total United States labor force of 83 million persons (U.S. Department of Labor, 1971a). So why be concerned with such a small segment of the population? There are several justifications for such concern, a major reason being an historical, emotionally charged worry over the possibility of having a shortage of food in this country (Hathaway, 1963; Daft, 1971). Other justifications, some of which have recently been given renewed emphasis by the War on Poverty, are of an humanitarian type concern for the less fortunate in the society. And, another set of justifications, overlapping to a degree with the preceding, have to do with economically based concern for a section of the economy where serious imbalances persist.

In line with these justifications, it is informative to note the similarity of the agricultural labor force as an aggregate category as compared with another aggregate of people currently receiving much attention, that aggregate of people referred to as "poor." The two aggregates share many similarities along certain demographic characteristics: relatively low wages, as already indicated; comparatively low levels of educational attainment; high rates of unemployment and underemployment; larger families; over-representation of minority groups; relatively low levels of skills; and, others (Heady, *et al.*, 1965; Keyserling, 1964; Soth, 1965; Hathaway, *et al.*, 1968; Blau and Duncan, 1967.)[3]

Findings such as the above readily warrant additional attention to agricultural manpower. Beyond such gloomy demographic characteristics, however, the fact that the agricultural labor force is so small a segment and will continue to become even smaller serves, I think, to place the issue of agricultural manpower policy squarely where it belongs and where policy decisions which affect it are made, in the realm of value judgments. There may be no need for the society to be directly concerned with agricultural manpower nor to have an explicit policy aimed at improving its conditions. But, if this society is to take an active concern for the agricultural labor force, then what is to be the nature and direction of that concern?

Remove the Surplus Manpower: A Solution?

Overall, the attention or inattention and policy aimed at agriculture has had the effect of implying that the best way to improve conditions in agriculture would be to reduce the size of the agricultural labor force. That is, it would appear, again taking the economic, political, and moral framework of the United States as given, that from an analytical economic perspective, the ultimate long run solution to the surplus of agricultural manpower and the concurrent relatively low returns would be to hasten the already existing---but too slow---movement of manpower out of agriculture (Hathaway, 1963; Hathaway and Waldo, 1964; Perkins and Hathaway, 1966; Lianos, 1971; Ponder, 1971; Daft, 1971; Fuller, 1961; Beegle, 1961; Williams, 1961). This is the recommendation shared and fostered by most analysts of the agricultural scene. The word "implying" is used because there is little *manpower* policy which applies to agriculture, most of the policies of the U.S. Department of Agriculture being directed toward "land and capital"; these "land and capital" policies have the effect of displacing labor from agriculture, which is viewed as desirable (U.S. Commission on Civil Rights, 1965; Hathaway, 1963; Tolley, 1971; Ponder, 1971; Daft, 1971; Rural Sociological Society, 1971).[4]

Rationale

A smaller agricultural labor force, according to this perspective, would result in several improvements. First, there would be fewer persons receiving the low returns which accrue to agricultural labor; this would represent a genuine improvement in that there would result fewer low-income, or poverty, families and individuals---that is provided those persons displaced from agriculture find remuneration elsewhere. Incidentally, the suggestion of encouraging or even forcing the excess manpower out of agriculture as a solution is usually accompanied by the assumption that those leaving agriculture will be absorbed by the larger economy, an assumption reserved for later comment. Second, a reduction in the size of the agricultural labor force should provide, through the effects of the laws of supply and demand, for some upward adjustment in the wages of those remaining in agriculture. Third, the rationale for moving manpower out of agriculture implicitly incorporates some notions about shifting manpower from the sectors of the economy where there are surpluses to sectors where shortages exist, thereby facilitating the overall efficiency and optimization of the larger economy (Samuelson, 1964; Lipsey and Steiner, 1969). This rationale is supported, of course, by the relatively low labor returns in agriculture. Such appears to be the overall rationale for reducing the size of the agricultural labor force. On its surface, the reasoning is impressive---which may account for the great amount of attention this solution has received, almost to the exclusion of other solutions, especially those which may seek to alter the social, economic, and cultural framework of the society (Veblen, 1921).

Related efforts

It is appropriate at this point to indicate several efforts on behalf of agricultural labor, efforts which could have more direct impact on improving the *immediate* situation of agricultural labor but which of themselves are not likely to provide long run gains. The more significant of these measures include: extension of minimum wage laws to agriculture; restricted entry of aliens who would perform agricultural work, usually at lower wages (Miller, 1971); selected unionization of agricultural workers; and, extension of unemployment insurance coverage to agricultural workers (Fritsch, *et al.*, 1973). These measures are in varying stages of implementation now and with varying degrees of coverage with the latter, unemployment insurance coverage, having the most comprehensive coverage and being the nearest to full operation. However, it can be noted that even proponents of these measures view them as short run attempts to bolster the low incomes of current agricultural workers while awaiting reduction in the future number of these workers. And, there have been considerable analyses, for example Heady *et al.* (1965), and Gisser (1967), to indicate that the long range effects of the measures suggested above will be to reduce or encourage the reduction of the size of the agricultural labor force.

Summary

In summary, it is fair to say that assuming that the frameworks of the United States remain as they are, and this assumption is the crucial point, it would appear that the only *currently* viable solution, indeed the ultimate solution for improving the returns to the agricultural labor force, is to reduce its size, while hopefully but as an afterthought placing those removed from agriculture in more remunerative employment.

Critique of "the" Solution

"Taking these variables as given"

That there are hazards in promoting, intentionally or by default, a monolithic policy of reduction in the size of the agricultural labor force as *the* solution to the farm labor problems is an understatement. A brief critique of this policy is set forth in the next section of this paper. The major flaw in the policy and the one most overlooked is the traditional qualification of social scientists in delivering their findings and recommendations: namely, the caveats---which are soon forgotten---about "other things being equal," or "holding these factors constant," or "taking these variables as given." The difficulty is that these "things" are not constant---as a society, we do not have to take them as "given." This point will be discussed again later. Other shortcomings in the "reduce ag labor" solution include the following.

May increase both surpluses

To begin, it should be noted that with a reduction in the size of the agricultural labor force there exists the probability of actually exacerbating *both* farm problems, labor and food. A reduction in the size of the labor force can bring about a concurrent increase in the production of agricultural commodities as the twofold result of the even greater efficiency wrought by consolidating the holdings of smaller farmers leaving agriculture and by the replacement of the departing manpower with machinery (Hathaway, 1963; Heady, *et al.*, 1965).

Higher wages: more automation

Further, the argument has been made that a smaller labor force in agriculture will, through the equilibrating mechanism of supply and demand, result in higher wages to labor; but, the advantages of this result are short-lived. Economists have repeatedly indicated that a change in the cost of a factor of production, such as higher wages for labor, changes the existing bases upon which decisions are made as to how much of any factor is utilized in the production process. As a factor becomes more expensive in relation to what it returns, there is increased pressure to find a relatively cheaper substitute for that factor. In the case of labor, the typical substitute is capital, or more crudely, increased automation, which in turn results in additional displacement of labor (Watson, 1963; Heady, et al., 1965; Lianos, 1971). The substitution of factors, especially the substitution of capital for labor, is a universal economic process, and not unique to agriculture (Watson, 1963; Lianos, 1971). However, the substitution process is particularly relevant to firms which face a competitive market structure, such as farms, and to labor which lacks protective techniques of unions, collective bargaining, and the like, such as agricultural labor (Watson, 1963; Samuelson, 1964; Bishop, 1967b). Heady, et al. (1965), summarizes the data depicting this substitution phenomena as it occurs in agriculture quite concisely, as have others (Hathaway, 1963; Lianos, 1971), referring to the process as a "technological treadmill."

Alternative jobs and aggregate demand

There are additional difficulties with the policy of hastening the exodus of manpower from agriculture. A major difficulty hinges upon the manner in which people leave agriculture, namely few specific provisions are made to help find acceptable new employment opportunities for those leaving agriculture (Daft, 1971; Ponder, 1971; Tolley, 1971). A partial explanation of why there are few such provisions lies in the concepts we have of the economy and society. We observe that returns to labor are lower in agriculture than in any other sector of the economy and that there is a surplus of labor in agriculture; from these observations we conclude that people should therefore leave agriculture for some other sectors and that they will be relatively better off in any other sector than they were before. Such conclusions are founded on the assumption that this shifting manpower will gravitate to sectors where labor shortages exist, thereby facilitating the overall efficiency and optimization of the larger economy, on the further assumption that those displaced from agriculture have skills and qualities marketable in the nonagricultural sectors, and lastly on the assumption that those displaced have the ability and willingness to migrate to other areas---to wherever there may be jobs. Each of these assumptions is questionable. First, the most efficient displacement of agricultural labor has historically taken place in times of rapid economic growth at the national level, efficient in terms of providing significant employment alternatives to those leaving agriculture; indeed, the rates of departure from agriculture have always been greater in times of relatively rapid economic growth (Baumgartner, 1965; Fuller, 1961). In the language of "push-pull" factors employed by many rural sociologists, it is the "pull" factors of economic growth which have the most effect on both the rate at which people leave agriculture and on the possibilities of providing alternatives which represent meaningful improvement to those leaving agriculture. The reason for this is simple: growth means new jobs are being created. For these "pull" factors to operate, as expressed by labor shortages elsewhere in the economy, requires that there be a sufficient level of aggregate demand to sustain growth rates in the national economy (Mangum, 1967; Due, 1968; Committee for Economic Development, 1969), which in turn requires an aggressively pursued fiscal and monetary policy by the federal government. Yet, while the nation has the technical knowledge requisite to undertake an active fiscal policy, we as a nation have not demonstrated the willingness---with the exception of war periods---necessary to pursue such a policy (Center for Strategic Studies, 1967; Committee for Economic Development, 1968). Furthermore, the economy may now be entering a "slowing-down" period which will have a detrimental effect on improving the alternatives available to agricultural labor, unless agressive fiscal and monetary policies are implemented. In sum then, the position taken here challenges the easy assumption that to solve the agricultural labor problem it is merely necessary to "push" people out of farming. To remove people from agriculture with no attention to their attachment to the larger economy is no solution: to solve the manpower problems of agriculture will require recognition of the relationship such manpower has with the macro economy of the nation.

Skills, talents, and aggregate demand

The talents, skills, and other qualities of those leaving agriculture which may be marketable in nonagricultural sectors further demonstrates the need for an appreciation of the role of fiscal policy and the economics of growth. As an aggregate category, the agricultural labor force relative to other sectors of the labor force has lower skill levels. During periods of rapid growth, lack of skills is of less importance; a person still has several opportunities. But during periods of slower growth or of actual recession, the person with lower skill levels is at a constant disadvantage; this person must compete for the few available jobs against people more qualified than himself (Mangum, 1967).

Geographic mobility patterns

A major oversight occurs in not making explicit provisions to help those leaving agriculture to move to other areas. To those who view the agricultural scene with a middle class perspective, with its rather easy acceptance of geographic mobility, it is rather easy to say that many of the people engaged in agriculture would profit by leaving their present locations. This perspective fails to account for whether or not such people have the means necessary to move and just as important---if not more so---whether or not the people desire to move. As for physical ability to move, suffice it to say that persons having low incomes, perhaps experiencing unemployment, and with related attributes find it difficult if not impossible to move. However, the psychological and social factors related to willingness to move are the more difficult factors for which to account. While not yet understanding the phenomena, social scientists have documented a tendency of many people to "identify with the land," or with a geographic area (Weller, 1965; Spicer and Thompson, 1972)---a phenomena which makes leaving no easy task. In a related manner, only recently it has been discovered that style of geographic mobility is different for various classes, with the styles for lower socioeconomic classes varying markedly from that of other classes (Choldin and Trout, 1971; Kleibrink, 1971; Lansing and Mueller, 1967; Shannon, et al., 1966; Weller, 1965). Persons from the middle and upper classes tend to migrate as individuals or single family units, readily adjusting to a new social environment, confidently calling upon a ready repertoire of social skills with which to meet the exigencies of the situation. Persons from lower classes, by contrast, tend to utilize a "frontier" pattern: a few individuals or families go first, learning whether or not and how they can survive in the new surroundings; if they are successful, then more families from the sending area join them, the original families serving to facilitate the adjustment of the new arrivals, and from the newly established "settlement," the migration may be extended again. And, even in those cases of successful lower class movement, there is the probability that should conditions in the "home" area warrant, because of new jobs or whatever, those who have successfully moved will return "home" (Weller, 1965; Marshall, 1972; Kleibrink, 1971).

Summary, Values, Other Solutions

The preceding has been a brief attempt to present the generally accepted position on how to solve the agricultural labor problem, to develop the rationale of that position, to indicate the assumptions underlying that rationale, and to critique that position and rationale. In short, the generally accepted solution is to remove "excess manpower from agriculture." The rationale of this position is impressive and is easily supported by the readily observable low returns to agricultural labor, which may account for the great amount of attention this solution has received, almost to the exclusion of other solutions, especially those which may seek to alter the social, economic, and cultural framework of the society. However, this solution is too facile: it rests on many unsafe assumptions concerning the psychological and sociological nature of man and also assumes several historically fluctuating economic factors to be constant. As important as correcting these misconceptions are, there is something more important: the collective values of the society as related to agriculture. These values have not been articulated; the social sciences in general have not addressed themselves to formulating a coherent set of values with which to guide policy. As a very striking example of both this lack of values and the role they could have, consider the following. A recent, detailed study of the structure of agriculture has concluded unequivocally that it is possible to provide this nation with more than sufficient agricultural commodities from either a structure characterized by a high degree of concentration or by one characterized by a low degree of concentration, with no significant change in price or quality for the consumer (Guither, 1972). That is, the consumer can have the same benefits from either a relatively small number of large farms or from a relatively large number of smaller farms. Since either structure is possible and equally advantageous to the consumer, the structure we have in the future is a matter of choice, to be guided by our values---hopefully. But, current policies toward agriculture are such that they favor a high degree of concentration and are increasingly promoting more concentration (Guither, 1972; Daft, 1971; Hathaway, 1963), while simultaneously no one knows for sure just what we desire for agriculture.

Another example which will serve to demonstrate what is meant here by a lack of attention to articulating values occurs in reference to economics. Everyone knows what the national economic goals are: full employment; stable prices; and, continued economic growth. Occasionally, someone not too concerned over being denied the title of a "truly scientific economist" will throw in a pinch of a fourth goal concerning some minimum level of political and personal freedom. At any rate, this threefold set of economic goals are recited as litany in nearly all first rate economic texts (Due, 1968; Ferguson and Kreps, 1962; Lipsey and Steiner, 1969; Samuelson, 1964) and all economic activity is justified in the name of one or more of these ends. By contrast, where are our litanies of national goals from sociology, political science, and others? With few exceptions (Etzioni, 1968), even the effort to work in such an area is discounted.

While it is not the purpose of this paper to propose and argue for alternative solutions, it is the contention here that thought should be given to breaking the confines of our traditional approaches to problem situations and attempting to rise above the limiting assumptions of our disciplines. To be certain, there are other solutions to the farm problem (Daft, 1971; Heady, 1971), one of which could be the following example. An obvious solution, yet one often overlooked and usually soundly denounced when suggested, would be to leave agricultural manpower where it is, subsidizing an equitable rate of return where necessary, restrict new entry into agriculture while facilitating the existing trend toward a reduced agricultural labor force, and simply give away whatever surplus of commodities which might occur to less affluent nations. However, for whatever reasons, proposals of this nature have seldom appealed to policy makers of this or other nations; and, although certain aspects of such a proposal have been implemented from time to time, they have not been carried to the extent, nor implemented with the thoroughness necessary to have the ameliorative consequences desired (Hathaway, 1963; Fite and Reese, 1965; Galbraith, 1958).

THE NEED FOR DATA ON HUMAN FACTORS IN AGRICULTURE

Whether or not they collectively endorse the policy, even if it is an indirect policy, of reducing the size of the agricultural labor force, analysts are in agreement that their information on the human factors related to agriculture is deficient, especially in comparison to data on production functions, financial structures, biological phenomena, and similar aspects. There is as great a need to investigate social factors, for example, the characteristics of the entire agricultural labor force, particularly of those having the least adequate provision from agriculture.

However, without belaboring the point, it has been demonstrated that the majority of the activities of the agricultural agencies, such as those of the Department of Agriculture, are aimed either at those persons handling successful farm operations, or, primarily, at the larger holdings of land and capital, which results in attention going to these same successful persons---those whose future in agriculture is relatively assured, rather than to those smaller or less successful farmers and to farm workers whose future in agriculture or any economic sector is uncertain (Guither, 1972; Hathaway, 1963; Tolley, 1971; Ponder, 1971; Daft, 1971; Rural Sociological Society, 1971; U.S. Commission on Civil Rights, 1965). To be blunt, the major thrust of research activities and concern is away from those facing the greatest difficulty in agriculture, although, what with the arrival of the "War on Poverty," there has been a renewal of interest in these agricultural groups (Keyserling, 1964; Fishman, 1966).

OCCUPATIONAL STUDIES AND AGRICULTURE

Somewhat filling the knowledge gap, especially with regards to relating agriculture to society in a macroscopic sense, have been studies of occupational mobility (Blau and Duncan, 1967; Lipset and Bendix, 1959; Bendix and Lipset, 1966; Smelser and Lipset, 1966). Accordingly, it is to be shown here that through the general apparatus of occupational mobility studies---but with refinements---a great deal of information relevant to policy decisions for agricultural and other types of manpower can be systematically investigated.

Critique

Categories too broad

But refinements are necessary. For example, while insightful summaries concerning agriculture can be gleaned from such occupational mobility studies, their usefulness is limited due to a flaw almost universal among mobility studies. The typical occupational mobility studies are not designed to give specific attention to agriculture, nor for that matter to any single occupational category, but rather to the broad patterns of movements across the entire occupational structure. Thus, and here is the flaw, such studies employ categories which, as concerns agriculture, are too broad, too general to be of much use for discriminating between types of agricultural manpower. For example, the usual procedure in mobility studies is to begin with a distinction between "manual" and "nonmanual" occupations, or between "blue collar" and "white collar" work, which is defensible as this distinction parallels differences among many social dimensions, such as prestige, income, education, illness, and others (Lipset and Bendix, 1959; Blau and Duncan, 1967; Shostak and Gomberg, 1964; Kadushin, 1966). If greater attention is given to differentiation within the broad manual-nonmanual categories, it generally does not include an improvement in terms of attention given to agriculture, as agriculture is usually represented by such all-inclusive categories as "farm" and "farm work" or at best a simple distinction between "farm owners and operators" versus "farm laborers" (Blau and Duncan, 1967; Taylor, 1968; Wright, 1968; Lipset and Bendix, 1959).

Given the complexities involved in attempting to generate classificatory schemes which will encompass the occupational spectrum and the exigencies facing the researcher attempting to perform longitudinal or international comparative studies, there is little wonder that such broad categorizations as "farm work" or a mere dichotomization between "farm owner or operators" and "farm laborer" are used. However, while such procedures are in some cases absolutely necessary due to the needs and problems involved in rendering data from many diverse sources comparable, researchers have long acknowledged that they are aware that great diversity exists within their broad categorizations relating to agriculture (Taylor, 1968; Wright, 1968; Blau and Duncan, 1967; Baumgartner, 1965; Daft, 1971). Still, the generalizations regarding agriculture as a homogeneous category persist and agriculture fails to receive the amount of attention needed to clarify and pin-point the problem groups within it, nor for that matter the amount of attention given to other occupational categories---say, for example, the study given to distinguish among and stratify the variety of white collar occupations (Mills, 1951), or to trace the inflow and outflow of professionally employed persons, or to depicting and analyzing the lives of nonagricultural blue-collar workers (Shostak and Gomberg, 1964).

Low prestige, overlooked

A related shortcoming of macro occupational mobility and manpower studies as pertains to their relevancy for agriculture concerns still another manner in which agriculture is slighted: studies of mobility tend to be concerned with *upward* mobility and with rates of mobility *into* upper-level occupations; since agriculture *per se* is rather low in occupational classification schemes, it, as well as other similarily situated occupations, tends to be overlooked as a unit of analysis (Hodge, Siegel, and Rossi, 1966; Hodge, Treiman, and Rossi, 1966). A notable exception to these tendencies to slight agriculture is the work of Perkins and Hathaway (1966), although others appear hesitant to follow their lead.

Failure to integrate levels of analysis

Other areas of shortcomings in mobility and manpower studies as a general category---especially relevant from the perspective of sociology and social psychology---concern a lack of attention to the nature of the interaction which personality attributes and various social subsystem units have upon the mobility patterns and value orientations of individuals and, in turn, a concurrent failure to link these individual patterns with general patterns of "economic development" in the macro system, that is, the society (Parsons, 1951; Yinger, 1965). In other words, there are two typical procedures followed. One procedure is to utilize a highly individualistic, or micro, perspective which focuses upon describing the standard socioeconomic status features, such as educational attainment, occupation, and income, of *individuals*; the reasons for success or failure---

upward or downward mobility---are thus viewed as lying within the individual. This procedure fails to account for the influences from processes occurring in the society, from varying personality types and from various subcultural or subsystem units to which individuals are attached. On the other hand, the second, widely used procedure is to adopt a macro level perspective, but one narrowly economic in nature, from which to describe the end results of processes which affect mobility, for example, gross national products and rate of growth, rates of industrialization, capital investments, rates of unemployment, growth in per capita income, funding levels for various social programs, and so on. This procedure, while accounting for the influences of some societal processes, similarily fails to account for the influences from varying subcultural and subsystem units. Neither procedure can answer questions such as the following: "What is the nature of the linkage--if any--among personality types, cultural milieu, patterns of mobility, and rates of economic development?" "Do certain forms of group super ordinate - subordinate relationships result in predictable patterns of creativity, which in turn influence the nature of mobility?" "How does the pattern of structural development in a society influence the development of a predominant type of personality, which in turn has consequences for further structural change?" "What are the impacts of various political and legal structures upon rates of individual and group development?" "Are there particular sets of subcultural values which promote mobility while others hinder it?" "Does the work group and work context with which individuals are associated have any influence on mobility, and, if so, what is the nature of this influence?" Another problem with both procedures is that they imply that there is only one, universal pattern of success which is to apply to all persons. It would be interesting to begin with individuals located in various subcultural groups and to determine how "success" and mobility is variously defined by these groups.

In short, there needs to be attempts to do research which integrates these various levels of analysis (Parsons, 1951; Yinger, 1965). While most social scientists readily acknowledge the importance of such information, systematic research in these areas is slight relative to the traditional approaches. It is notable that the indicated shortcomings and the posed questions lie in the interstices between disciplines, in the realms which are easily dismissed--and hence tend to be dismissed--as "being interesting and important but impossible to research" or "as not conforming to the assumptions which form the foundation of this discipline and thus not our responsibility to research." Significant, stimulating exceptions do exist, however, as evidenced for example in the works of McClelland (1961), Hagen (1962), Riesman et al. (1950), Veblen (1899, 1921), Commons (1924), and others; unfortunately, such works are relatively few and seem to be ignored or misunderstood.

Occupational versus social mobility

While expounding the deficiencies of occupational mobility studies, reference must be made to the fact that occupational mobility is only one component of that more comprehensive process, social mobility. As social mobility is such an encompassing concept, problems are quickly encountered in attempting its measurement. This difficulty in measurement is partially another example of the familiar paradox of balancing reliability against validity; that the researcher concerned with generalizations cannot do in-depth studies of the Oscar Lewis variety (1961, 1965) on a significantly large enough sample of respondents leads to attempts to narrow consideration to a few or even a single valid indicator of social mobility. The seemingly endless dispute over which of the available indicators is the best measure of social mobility is pointless; there is no such indicator, always valid, always yielding comparable information (Lasswell, 1965). Each different variable measures some different aspect of mobility, and thus the researcher must know what it is that he wishes to investigate and which variable or variables best approximate it. The mere fact that occupation is the indicator most frequently utilized for social mobility studies cannot be taken as an indication of its validity; one must consider the nature of the problem and the situation which he is researching.

Defense

But, now that the use of occupation as an indicator of mobility has been berated and the shortcomings of mobility studies in general have been indicated, what can be said in their favor? First, with regard to mobility studies, despite all noted shortcomings, such studies have not been applied in earnest and with vigor in the realm of agricultural manpower--so there is still much to be gained through their application here while at the same time improving the theoretical and methodological components of the studies (Baumgartner, 1965; Fuller, 1961). And, despite the narrowness of occupation in referring to overall social mobility, worthwhile indications of the extent and nature of the social mobility of the agricultural labor force can still be obtained for basically two reasons. First, of the many social variables, occupation is one of the more readily quantifiable--though not perfectly and not without validity problems of its own; this has added advantages for working with large populations and facilitates comparisons among various segments of the society. Secondly, occupation quite often is closely associated with other aspects of the social realm, e.g., educational attainment, income, prestige, style of life, attitudinal structures, and others (Blau and Duncan, 1967; Kadushin, 1966; Lipset and Bendix, 1959; Shostak and Gomberg, 1964); this latter fact about occupations seems to be especially true of the more industrialized world, of which the United States is an extreme example, where members of society are expected to work in order to earn money to pay for the necessities and luxuries of life.

OCCUPATIONAL STUDIES: A MEANS TO DATA ON HUMANS

From this point forward, a few of the research possibility suggested by the perspective of mobility studies are presented. These possibilities are illustrative, not exhaustive, and are directed at areas thought worthy of attention.[5]

Research Possibilities

Conceptual clarification

A worthwhile starting point in this area is conceptual clarification which is sorely needed with respect to agricultural manpower. Not only would the application of an occupational mobility framework aid in clarification, but to perform these studies properly would require that additional clarity be achieved. For example, the terms "agricultural manpower," "agricultural labor force," and "farm labor force" are commonly used interchangeably as being synonymous, even by experts, when, to the contrary, each refers to markedly different segments of manpower. The "agricultural labor force" is much broader than the "farm labor force," the latter term usually being employed to designate only those engaged in "first line production" agriculture while the former--"agricultural labor force"--includes the "farm labor force" and additionally refers to those engaged in "second line production," "processing," and agriculturally related concerns (Hoover, 1969). This explains the introduction of the term "agri-business," which may actually confuse more than it clarifies. It has been suggested that the new attention to agribusiness along with attempts to classify the occupations in this field will have low "pay-off value" as these occupations are not significantly different from similar ones related to other areas of production and the currently existing occupational classification schemes are sufficient (Sturt, 1972). According to this same source, the attention to agribusiness is diverting effort from "first line production" agriculture, or the farm labor force, where there has been relatively little work done on differentiation of occupations, specification of job requirements, and up-grading of jobs, but where rewards for such work would be the greatest.

To say there is a distinction between the "agricultural" and the "farm" sectors appears trite and therefore seemingly to engage in the trivial. Such is not the case as evidenced by a recent, richly endowed, regional project the directors of which were experts and who were interested, among other things, in studying several dimensions of the "farm labor force" and then comparing these with non-farm agricultural components; but, the project was flawed in this respect because many of the instruments used elicited responses which refer merely to "agriculture."

The term "farm labor force" itself needs refining, as there is not consensus as to what it refers, being used at times to include, at others to exclude farm owners and operators. In its most generic use, the term farm labor could be said to apply to all who earn all or a part of their livelihood from production agriculture--farm owners, operators, managers, foremen, and farm workers of all types. Such a wide application of the term can be justified in that people in all these categories do receive a return for their labor input. Including owners in the term farm labor force can redirect attention to many smaller farm owners whose single largest input in production is their own labor, but who, because they are labelled "owners," are excluded from consideration under "labor" policies (Heady, et al., 1965; Hathaway, et al., 1968; Soth, 1965; Lianos, 1971).

Unfortunately, the scope of most research is narrowly focused upon investigations of "workers" only, or ambiguously upon "agriculture." Such situations are due to lack of imagination and foresight.

Heterogeneity in agriculture

Closely related to the necessity for clarification of concepts relating to agriculture is the high degree of heterogeneity acknowledged to exist among persons subsumed under the agricultural label. While "agricultural" or "farm" labor in general is a "problem cateogry," not every agriculturally employed person belongs in this "problem category." Greater attention needs to be given to specifying the heterogeneity and differentiating among the varying types of persons engaged in agriculture, thereby pinpointing the problem groups which exist within agricultural manpower. Occupational mobility studies lend themselves well to such an undertaking, providing as they do a general framework of synthesizing concepts and analytical procedures, suggesting the dimensions along which to stratify agricultural manpower. One could go beyond only describing the dimensions of heterogeneity which exist by demonstrating the social significance of these differences through an analysis of the occupational mobility patterns existing within agricultural manpower, utilizing both objective and subjective measures to depict the mobility patterns, and relating these patterns back to the major structural differences within the agricultural labor force.

A "caste" within agriculture?

This type of research should be wide open and ripe for some innovative approaches. For example, recall the aggregate comparison made earlier between the agricultural labor force and the "poor." To that earlier synopsis can be added the general finding from occupational mobility studies to the effect that most mobility between generations occurs across one or two steps of the occupational hierarchy (Smelser and Lipset, 1966; Lipset and Bendix, 1959; Blau and Duncan, 1967; Berelson and Steiner, 1968). One is then struck with the possibility that there may exist an agriculturally oriented caste within the agricultural labor force. Or, in other words, there may exist or be developing a "circle of agricultural labor" from which it is increasingly difficult for succeeding generations to escape. The idea of a caste-like agricultural labor force, or at least the possibility of there developing such a caste, is given increased likelihood by series of findings such as the following. First, demographers have indicated that the great migration from rural to urban areas and from agricultural to non-agricultural employment has supposedly depleted the ranks of those capable of migrating to urban areas and to non-agricultural jobs; those remaining are more or less trapped where they are because of not possessing characteristics conducive to leaving (Bishop, 1967a, b; Perkins and Hathaway, 1966; Schultz, 1967; Fuller, 1961). Second, the greatest rates of leaving agriculture for other employment have historically occurred during periods of economic expansion; the fact that the United States is currently experiencing a slow-down in the rate of growth and difficulty in maintaining full-employment would indicate increased difficulty in leaving agriculture for those still there (Schultz, 1967; Fuller, 1961; Hathaway, 1967; Perkins and Hathaway, 1966; Daft, 1971; Heady et al., 1965). And, finally, economic policies of the United States have traditionally and currently been oriented toward the earnings of capital and land rather than on the earnings and difficulties of labor; such emphases away from those experiencing the burdens of the farm problem do little to improve their conditions (Schultz, 1967; Hathaway, 1967; U.S. Commission on Civil Rights, 1965; Lianos, 1971; Ponder, 1971; Daft, 1971). Whether or not there in such a caste is an empirical question, and just one illustration of the type of research that might be performed.

Typologies

Another possibility worth exploring would be the attempt to create a set of heuristic typologies of agricultural workers; this would follow naturally from the work on descriptive analysis of the labor force and would parallel past and current developments of typologies of farmers and of various sectors of the farm economy (Fritsch, 1973).

Improvement in Variables

Ethnicity

In addition to bringing increased attention to the farm labor force, there should be improvements in the breadth and depth of the studies. One avenue to this is to upgrade the variables included for research. Ethnicity, for example, is increasingly being incorporated as a research factor; along these lines, use of ethnicity needs to be encouraged, particularily increased attention to Mexican Americans as well as Blacks.

Family

Other factors which might be considered include more attention to less obvious aspects; for example one might consider an investigation of farmers or farm workers using the family as the unit of analysis, or perhaps, develop, through research, the concept of "work role." Using the family as the unit of analysis could proceed by collecting data on family size, a work history on each member of the family noting whether the work performed was farm or non-farm and whether temporary or year round, and total earnings of each member of the family.

Work role

The term "work role," which is meant to be a more inclusive term than occupation, is used here as a broad, sensitizing concept to refer to all aspects related to the performance of work; "occupation" is thus but a single component of "work role." Attention could be devoted to differentiating among components of the work role, to portraying the variations among agricultural workers with respect to these components, and to interpretation of their significance. Components of the work role can be divided into two categories on the basis of objectivity. Objective information might include: detailed information on actual work performed, industry or type of business in which performed; total earnings by industry and occupation; similar information for a possible second job; migration status; and, perhaps others. Variables of a subjective nature can embrace the respondent's preferences for performing farm versus non-farm work, reasons for doing farm work, likes and dislikes about current job, and where applicable, reasons for performing seasonal work, reasons and preferences for doing migrant work, and an indication of whether or not the respondent thought he could have continued any non-farm work he might have recently performed.

As related to generational studies

Gathering data on both subjective and objective dimensions would also improve the quality of generational mobility studies, which almost traditionally utilize primarily objective data. Equally if not more important as objective patterns of mobility are the attitudes and orientations of the respondents toward these patterns, toward themselves, and toward their children. The "likes" and "dislikes" about one's job, mentioned above in connection with work role, are also of importance here. Another subjective area of investigation, related to generational mobility, pertains to personal status orientations: What do farmers and farm workers desire for themselves in connection with culturally prescribed goals, such as occupation, education, and income? What do they expect? Are they making explicit efforts to achieve their goals, and what sacrifices would they be willing to make to gain these goals? In a similar manner, what do farmers and farm workers desire and expect for their own children? How do these projections for their children compare with the personal projections of the parents, or with the actual pattern of mobility experienced by the parents?

As regards objective data on generational mobility, the design of a study in this area would contribute most by incorporating a design to allow both inter and intragenerational analyses. Intragenerational analysis obviously proceeds by establishing the career patterns of individuals, but care must be taken to include a sufficiently long occupational history; this caution also applies to soliciting data on occupation of parents for intergenerational objectives. An additional facet of the intergenerational concern would be to investigate the occupational statuses of siblings of farmers and farm workers (Butler, 1970).

And, lastly, taking agricultural workers as the focal point for study, in contrast to more traditional approaches which focus on the entire occupational category (Blau and Duncan, 1967; Lipset and Bendix, 1959), can be expected to contribute to filling the void on this group of workers--a group who definitely warrant the attention.

FOOTNOTES

1. The author appreciates the critical comments from Carlton R. Sollie and Harold F. Kaufman of Mississippi State University and from William P. Kuvlesky and Conrad F. Fritsch of Texas A&M University in response to an earlier version of this paper; the author also benefited from discussion of related material with Michael F. Lever.

2. It is indeed a paradox that on the one hand scholars can point to a surplus of food in the United States, to storage bins bursting with excess food which is often wasted, to *unused* excess capacity of the farm sector, and on the other hand can indicate that even *within* the affluent United States society a significant portion of people suffer from malnutrition and starvation (Coles, 1969; Fishman, 1966; Gordon, 1965). When the scope of analysis is broadened beyond the United States, the paradox of excess food and concurrent starvation is even more ironic; malnutrition and starvation--shortages of food--are still "stalking specters" for many of the world's people (Heilbroner, 1963; Myrdal, 1957). In order to state that there is a surplus of food, anywhere, one must of necessity add the conditional statement--the apology?--about "taking the political, economic, and social framework of this society as given!"

3. Data are not readily available for the aggregate referred to as "agricultural manpower" due to inadequacies in operationalization of concepts. For example, the Bureau of the Census classification "rural farm" was originally intended as a measure referring to those employed directly and primarily in agriculture; however, it is widely recognized that, among other shortcomings, many persons *live* on a rural farm while being primarily employed in non-agricultural pursuits. For a critique of concepts referring to the agricultural labor force and proposals of alternative schemes, see Hathaway, *et. al*. (1968).

4. See especially the Rural Sociological Society entry for an extensive and current bibliography of materials pertaining to discriminatory practices of the U. S. Department of Agriculture (Rural Sociological Society, 1971).

5. Some of these possibilities were suggested by the author's involvement in regional project NE-58, "An Economic and Sociological Study of Agricultural Labor in the Northeast States," and particularly in discussions with Vernon Ryan and Rex Warland of Pennsylvania State University, Ward Bauder of Cornell University, and William Kuvlesky of Texas A&M University. Indeed, there may be some opportunity to accomplish a few of these possibilities.

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Status Projections of Lower Social Strata Pre-Adolescents: A Focus on Some Intervening Social Psychological Variables

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INTRODUCTION

As research on mobility and achievement orientations has accumulated, research efforts have become increasingly analytical rather than descriptive, and increased attention to social psychological variables has resulted. These two interrelated trends are more than merely the examination of a larger number of more diversified variables which may be associated with status achievement orientations. These trends represent an attempt to explain certain aspects of career orientation, such as occupational and educational status projections, in terms of the process involved.

Ascertaining this process necessitates the examination of the relative influence of variables intervening between antecedents such as family background, family structure, and measured intelligence and the dependent status projections. This need is supported by an emerging body of literature which suggests that while social class and measured intelligence have traditionally been shown to have positive correlation with occupational and educational status projections (Haller and Miller, 1967; Kuvlesky, 1969), there is ample reason to question direct relationships. That is, the relationships between antecedent variables and status projections have been explained, in part, by social psychological factors such as parental encouragement and parent-child relations (Sewell and Shah, 1968; Kandel and Lesser, 1969; Rehbert, Schafer, and Sinclair, 1970). These findings raise a question about the nature of stratification as a major source of variation in achievement values and call for more attention to additional intervening variables.

Numerous studies of youths' educational and occupational projections have been concerned with the identification of relevant independent social psychological variables such as parental encouragement and aspirations (Kandel and Lesser, 1969), motivation to achieve (Rosen and D'Andrade, 1959; Brim, 1965) and self-concept (Slocum, 1958; Herriott, 1963; Brim, 1965). Only recently, however, has there been much concerted effort to examine such social psychological factors as an important cluster of intervening variables. For example, Sewell, Haller and Ohlendorf (1970) have developed a complex model of the educational and occupational status attainment process. Congruent with a reference group perspective, it links socioeconomic status and measured intelligence with educational and occupational attainment by way of the influence of significant others as well as by educational and occupational aspirations. Also representative of the focus on intervening social psychological variables is Picou and his associates' (1972) examination of academic achievement orientation and significant others influence in a sequential model explaining educational expectations.

The objective of this paper is the examination of a cluster of social psychological variables; child's academic motivation, mother's status projections for her child, child's self-concept, and significant others influence, as they intervene between other independent variables and the child's status projections.

CONCEPTUAL AND THEORETICAL PERSPECTIVE

The major assumption operative throughout this paper is that aspirations, with regard to projected status attainment, reflect generalized cultural values. Educational and occupational status projections are conceived as concepts from which success and achievement values may be inferred.

The cultural in-put of the achievement ethos (see Williams, 1970, for discussion) has been implied as profound in Merton's (1968:185ff) thesis that the achievement ideology pervades all social strata in the United States. Support for Merton's thesis is to be found in the fact that regardless of social class, ethnicity, or age, high prestige occupations are aspired to in the United States (Empy, 1956; Stephenson, 1957; Antonovsky and Lerner, 1959; Gist and Bennett, 1963; Hamilton, 1964; Kuvlesky, 1969). In light of the lack of knowledge concerning the nature of specific occupations (Slocum, 1966: 186, Taylor, 1968: 189) occupational prestige is the main basis on which aspirations are based (McClelland, 1955: 239; Merton, 1968: 185ff., 292).

Important for this study is children's awareness of occupational prestige, their perception of the opportunity structure, and their social class self-identification. A recent study of black and white children from grades three through twelve reveals that as early as elementary school: (1) children rank occupations in an order almost identical to that of adults; (2) although children do not accept the doctrine of equality of opportunity for all, a majority of every age, race, and socioeconomic level are optimistic about their own personal opportunity; and (3) children, like adults, tend to select the middle class as their social locale (Rosenberg and Simmons, 1971).

A major contention of this work is that many investigators have obscured the cultural basis of aspiration (as operationalized in this and most aspiration studies) by their contention that the high "success goals" of young people are highly "unrealistic" in view of objectively slim possibility of attainment (Lott and Lott, 1963; Coleman, et. al., 1966; Slocum, 1966; Cosby and Picou, 1971). The "unrealistic-realistic" conception of aspiration, largely derived from the psychological developmental theories of occupational "choice," is incongruent with some evidence that occupational expectations do not become more "realistic" through high school (Cosby, Dietrich, and White, 1972) and ..."conversely many become less 'realistic' " (Kuvlesky, 1969: 18). In the absence of realistic or objective bases for occupational aspirations, coupled with perception of the occupational prestige hierarchy, cultural values regarding occupational goals provide the context of aspirations. That is to say, in this perspective the high success goals of young people are not "unrealistic" personalized goal-commitments, but rather "idealistic" or cultural goals given individual expression.

Although many authors have conceptualized aspirations as "ideal" phenomena, some have made a distinction between aspirations and expectations, the latter being termed "realistic" (Stephenson, 1959; Han, 1969).

The position forwarded here is that both are within the "idealistic" realm of analysis. Expectation is not viewed as a realistic appraisal of future goal attainment, but rather the projected level of goal attainment resulting from the extent to which awareness of limitations deflects the projection from an idealized aspiration. This is congruent with Haller's (1968) clarification of aspiration in which he points out that expectations are not realistic but are based on significant others' expectations. In other words, whereas aspirations are indicators of the extent of assimilation of cultural values, expectations are indicators of the extent to which cultural values are modified by perception of significant others' expectations (Haller, 1968) or by perception of barriers to the attainment of the most idealized status (Aldrich, 1970).

Support for this conceptualization of expectations as being within the ideal level of abstraction can be found in studies of southern rural youth that indicate a congruence between aspirations and expectations for a majority of respondents, while some respondents actually have expectations that are higher than aspirations (Ameen, 1968; Wright, 1968; Lever, 1969). Furthermore, in expectations alone, considerable upward intergenerational mobility orientation is indicated by lower status youth (Slocum, 1956; Heller, 1967; Simmons and Rosenberg, 1971). Finally, although barriers to occupational opportunity are generally perceived, this is not taken into account in aspirations (Rosenberg and Simmons, 1971) or expectations (Ameen, 1968). For example, in a Mississippi study of black high school juniors and seniors in which 80 percent of the students perceived some barrier, over 91 percent of those aspiring to professional occupations expected to achieve them (Bell, 1969). Even when perception of structural and personal barriers has been shown to have a negative effect on achievement orientation, occupational aspirations, and occupational expectations, high levels of aspiration and expectation still persist (Aldrich, 1970).

HYPOTHETICAL MODEL

Cultural values are learned, intensified or modified, in the process of social interaction. Thus social and psychological factors are important in the interactional process affecting individual achievement values. This notion is conveyed more explicitly by the following theoretical assumptions.

(1) Significant others influence and status projections for the child and the child's perception of his mother's affective behavior constitute socialization factors serving to link socioeconomic background, mother's achievement values, and the child's measured intelligence with the child's status projections (after Strodtbeck, 1958; Simpson, 1962; Herriott, 1963; Rosen, 1964a; Sewell and Shah, 1967; Kandel and Lesser, 1969; Kandel, 1971).

(2) Child's self-concept and achievement motivation constitute personal factors serving to link socialization factors with

the child's status projections (after McClelland, 1953; Elder, 1962; Rosen, 1964; Rosenberg, 1965; McCandless, 1967; Slocum, 1967).

Derived from the above theoretical assumptions concerning achievement orientation the following hypothetical sequence of variables is constructed.

Antecedent	Intervening		Dependent
Family structure			
Family socioeconomic background	Mother's child-rearing value (orientations	Child's self-concept	
Mother's achievement orientations	Child's perception of mother's affective behavior	Mother's status projections for child	Child's occupational and educational status projections
Child's measured intelligence and sibling order	Significant others influence	Child's academic motivation	

METHOD

Data Source

Data for this study come from an extensive questionnaire survey of 1412 lower social strata mother-child pairs in 1969. The design is purposive-quota sampling selecting racially homogeneous schools from rural districts (2,500 or less) that still have a substantial number of small farm population and from urban districts (above 40,000) composed of a large working-class population. Residential-racial subgroupings surveyed are (1) rural Appalachian white students (N=579) and their mothers (from Kentucky, Tennessee, and North Carolina); (2) rural black students (N=480) and their mothers (from Alabama, Mississippi, and South Carolina); and (3) urban black students (N=353) and their mothers (from Alabama, Kentucky, and Virginia). The child's questionnaire and the Otis-Lennon Intelligence Test were administered in group settings to all fifth and sixth graders in the schools selected. Interviews were then conducted with the students' mothers or mother substitutes by home visits. Subjects were deleted from the study when: (a) the child's IQ score was below 60; (b) data were incomplete; or (c) mother or mother substitute was lacking.

Measures of Variables

The following brief summary of operational definitions of the variables is arranged in sequence from dependent to independent variables. Variables

3,6,9,10,11,12,13,14,17,18 are scales or subscales determined by factor analysis and the coefficient of reliability is an inter-item measure determined from the factor analysis procedure.

1.	OCC	Child's occupational status projection - mean of aspired and expected - scored using NORC transformation of the Duncan Scale (Reiss, 1961: 265-275)
2.	ED	Child's educational status projection - mean of aspired and expected - 7 response categories; "8th grade" to "finish college"
3.	AC	Child's academic motivation - composite score on Elder Academic Motivation Scale (1962) and "liking school" subscale from Weiner Achievement Motivation Scale (unpublished). (Scale reliability = .74)
4.	MOC	Mother's occupational status projection for child - parallels OCC
5.	MED	Mother's educational status projection for child - parallels ED
6.	SEL	Child's self-concept - score on Lipsett Self-Concept Scale for Children (1958) (Scale reliability = .88)
7.	FATK	Child reports that father has talked with him or her about educational and occupational future - 2 items - responses to 10 categories; "mother" to "no one"
8.	MOTK	Child reports that mother has talked with him or her about educational and occupational future - parallels FATK
9.	COM	Child's perception of mother's degree and type of communication - "with" rather than "to" the child, mother explains decisions, child involved in decision-making - scale derived from Elder's Independence Training Items (1962) (Scale reliability = .49)
10.	PU	Child's perception of mother as "punishing" - punitive, rejection orientation - one of three subscales from the Bronfenbrenner Parent Behavior Inventory (Sigelman, 1965) (Scale reliability = .81)
11.	DM	Child's perception of mother as "demanding" - insists on high achievement, withdraws affection when child misbehaves - BPB, Sigelman (1965) (Scale reliability = .75)
12.	LV	Child's perception of mother as "loving" - affectionate, supportive, participatory orientation - BPB, Sigelman (1965) (Scale reliability = .81)
13.	CHA	Mother desires child to have "character" - emphasis on success, self-control, individuality - based on 3 choices from 16 characteristics - Kohn Parental Values Items (1969)
14.	OUT	Mother desires child to be "outgoing" - gregarious, happy, get along with others - Kohn (1969)

15.	FST	Child is first born or only child
16.	IQ	Child's score on the Otis-Lennon Mental Ability Test (1967) (Scale reliability = .70 -.80)
17.	ACV	Mother's achievement value orientation (Rosen, 1964) (Scale reliability = .81)
18.	ANO	Mother's anomia (Srole, 1956) (Scale reliability = .65)
19.	FBK	Family background - designed to represent socioeconomic status through a weighted (to equalize standard deviations) combination of NORC occupational scores for father's occupation (or mother's if no husband) fathers and mother's education, and mother's social participation
20.	HOZ	Household size
21.	NOH	No husband present
22.	WEL	Welfare status
23.	MOG	Mother's age

Procedure

Identification of the manner in which the variables influence aspiration is facilitated by regression analysis of our variables in a block-recursive design congruent with the "paths" of influence implied in the above hypothetical model.

In Duncan's (1966: 1) discussion of path analysis in sociology, he points out that "path analysis focuses on the problem of interpretation and does not purport to be a method for discovering causes." Duncan points out that path analysis amounts to a sequence of conventional regression analyses, the path coefficients being "beta coefficients" in a regression setup. More specifically defined, path coefficients are quantities which indicate the fraction of the standard deviation of a dependent variable for which a designated independent variable is responsible (Land, 1969: 8). That is to say, the path coefficient indicates the direct effect on one variable after the effects of all other antecedent variables have been controlled.

A concern with linear, additive, asymmetric relationships among a set of variables which are conceived as measurable on an interval scale is a necessary assumption for the use of path analysis (Duncan, 1966: 2-3). For this study these assumptions must be "relaxed" to a degree. All the variables are not at the interval level of measurement and in actuality interaction among certain variables must exist. For exploratory purposes and provided that caution is executed regarding the nature of conclusions reached these assumptions can be relaxed (Labovitz, 1967).

Much of the literature related to aspiration has yielded results based soley on zero-order correlation; therefore, regression analysis may provide the capacity to clarify and interpret some previous findings.

FINDINGS

A brief descriptive profile of socioeconomic, demographic, and status projection characteristics is given in Table 1 indicating the disadvantaged nature and high status projections of the respondents.

The mean scores on the 23 variables by residential-racial subgrouping and by sex is shown in Table 2. Test of significance of the means reveals greater differences by sex in the dependent variables (upper part of chain) and greater differences by sub-groupings in the independent variables.

A more important concern for this study is whether the regression coefficients for the sub-groupings differ. Homogeneity tests were applied to the 212 sets of three standardized regression coefficients for males and females. The tests led to rejection of the homogeneity hypothesis (p .05) in only 13 cases for males and 14 cases for females. This is scarcely more than would be expected by chance, and while sub-grouping differences are of interest (see Table 3) analysis by sex is considered more important because of greater differences by sex.

Before moving to the regression analysis we would suggest that levels of significance should more properly be used as the basis of inference than the coefficients themselves. Most of the variables to be viewed as determinants of aspiration have fair amounts of measurement error which depress the apparent influence of the independent variables. This takes place in both the regression coefficient and the multiple correlation coefficient (see Cochran, 1970).

In order to ascertain the amount and type of influence of the variables on status projections a comparison of zero-order correlation, partial correlation, partial regression, and standardized regression coefficients is presented (see Tables 1-4).

This procedure enables the identification of first, the "direct effects" of the antecedents upon the dependent variable (the standardized partial regression coefficients) having controlled for the effects of all other variables. The most significant of these coefficients, of course, are to be taken as our path indicators or paths of influence.

Secondly, the "indirect effects" of the antecedents (as indicated by the amount of "reduction" in the coefficients when moving from zero-order correlations to standardized regression coefficients) are ascertained by tests of elaboration (spuriousness and mediation) and the "step-wise" regression procedure enables identification of the variables that account for the reduction.

For example, in the regression of OCC on all independent variables (Table 4) we note a significant zero-order correlation of .176 between OCC and MED drop to .090, a reduction of .086 which is significant at the .02 level of probability. A considerable amount of this spuriousness (-.052) can be attributed to the introduction of block IX which contains two variables (ACV and FBK) that have some indirect effect on

OCC. Additional reduction occurs when the effect of MOC, a variable correlated with MED and related to OCC, is partialled out.

Antecedents of OCC

In our consideration of the influence of all the antecedent variables on OCC (see Tables 4 and 5) the most striking feature is the amount of reduction in moving from zero-order correlation to the fully adjusted regression coefficients. Note that 15 significant zero-order correlation coefficients for males and 10 for females are reduced to only 5 significant regression coefficients. This amount of reduction indicates considerable interaction among the variables to produce spuriousness and mediation or indirect effects.

The variables with direct effects on males' OCC are MOC, MOTK, CHA, OUT, and to a lesser extent, DM. This is consistent with traditional contention that for youth, especially of lower social strata, upward mobility orientations are linked to maternal influence (Ellis and Lane, 1963). Perhaps more significant is the support for recent findings which suggest that measures of maternal influence such as mothers' expectations, aspirations, and encouragement are the main intervening factors explaining the indirect influence of other independent variables (Sewell and Shah, 1968; Kandel and Lesser, 1969; Kuvlesky, 1969; Rehberg, Schafer, and Sinclair, 1970). This is best seen in the tests of elaboration (see Tables 4a, 5a, and 8) which reveal that of the 4 variables with significant indirect effects on male's OCC (IQ, ACV, FBK, HOZ), MOC is the mediating variable in 3 cases.

The main variable with a direct effect on female's OCC is the parallel measure for the mother, MOC, and mother's values CHA and OUT are also influential but to a lesser extent. In contrast with males the role of the father's influence comes into play for females with FATK, rather than MOTK, being the significant source of influence on OCC. This finding is consistent with the contention that "the effect of parental intervention in the development of the child's achievement orientations is more frequently visible in the parent of the opposite sex" (Katrovsky, Preston, and Krandall, 1964). In view of father's influence on daughter's OCC it is curious to find that NOH has a positive direct effect that may be conjectured a mobility orientation "to compensate the consequences of structural incompleteness" (Kriesberg, 1967). Another curious finding is the relative lack of indirect effects, except that of IQ by way of MOC and COM.

Of special interest is the spuriousness in the association of AC, SEL, and ANO with OCC and relative modest indirect effects of IQ for both sexes and of FBK for males only. This lends support to the position that occupational status projections are not contingent upon evaluative criteria. That is, occupational status projections for our respondents are little influenced by motivation, self-evaluation, and socioeconomic background, variables presumably determining occupational orientations as well as success.

Antecedents of ED

The amount of reduction is more profound in the antecedents of ED (Tables 6 and 7) than for OCC. Note that a very large number of significant zero-order correlation coefficients are reduced to a mere handful of variables with direct effect. Furthermore, the variables with direct effect are also reduced indicating considerable interaction among the variables.

In contrast with OCC the antecedents of ED are more congruent with previous findings in the literature. AC, MED, and IQ have direct effects for both sexes. As MOC mediated the influence of other variables to OCC, similarly MED is the main mediating variable in the sizable indirect effect of numerous variables on ED, especially for males (see Tables 6a, 7a, and 8).

As in the antecedents of OCC we find a contrasting pattern of indirect effects by sex. Where indirect effects were sparse for female's OCC, in the case of ED significant indirect effects are more pronounced (see Table 8). Another pronounced difference by sex is the extent to which FBK mediates the negative effects of family structure variables (MOG, WEL, and HOZ) for females but much less so for males. The direct effect of FBK on female's ED is consistent with other studies of rural Southern youth (Sperry and Kivett, 1964) and raises the question of whether disadvantaged females are more likely to perceive or be influenced by barriers earlier than males.

By examining the final regression matrices for all variables (Tables 9 and 10) we see one of the most distinctive features of ED for both male and female is the very strong path of SEL→ AC→ ED. This is, of course, what would be predicted by previous literature on self-evaluation and achievement motivation (Hammond, 1954; Kohn, 1959; Komarovsky, 1962; McKinely, 1964; McCarthy and Yancy, 1971: 659). However, the strong antecedents of SEL in the variables LV, PU, DM were not found to indirectly influence ED through SEL→AC in the tests of elaboration. Therefore the convenient "linking up" of variables by all significant beta values would be inconsistent with tests of elaboration.

DISCUSSION

Perhaps the most interesting finding in the consideration of the antecedents of OCC and ED is the apparently different sets of paths of influence for each. Whereas OCC for both sexes is primarily determined by a parallel measure for the mother (MOC), attitudinal measures of the mother (CHA, OUT) and significant other influence in the parent of the opposite sex, there is no influence from the child's variables AC and SEL.

In contrast, ED for both sexes is strongly influenced not only by the child's AC, SEL, IQ, but also by FBK and measures for the mother, MED and ACV. Furthermore the parent-child relationship variables

(COM, LV, PU, DM) come into play with indirect effects indicating the possibility that socialization may have a greater influence on educational status projections than on occupational projections. In other words, occupational status projections tend to be relatively independent of criteria determining life chances while educational projections are considerably more influenced by socioeconomic, ability, and self-evaluative factors.

This may have several important implications for an analytical distinction between occupational projections and educational projections. First, it raises the question about any further attempt to treat occupational and educational status projections together as part of any constellation concept such as "ambition" (Turner, 1964). Secondly, the more definitive antecedents of ED, coupled with greater explained variance ($R^2 = .195$) and .206 for male and female OCC; $R^2 = .346$ and .290 for male and female ED), and more anticipatory deflection in educational expectations, possibly indicate less idealism in educational projections than in occupational projections.

A final consideration of the unique paths for OCC and ED is that each of these status projections is affected almost exclusively by the corresponding measure for the mother. That is to say, there is little affect of MOC on ED or MED on OCC. This is similar to Haller and Woelfel's (1972) recent finding that significant others' expectations regarding one aspiration seem to have no effect on the other. This finding, along with Haller and Woelfel's finding, raises the question of possible exaggeration of the extent to which mobility orientations of the child (OCC and ED) are actually transmitted by parental influence (MOC and MED). As Furstenberg (1971) cautions, parental influence on aspirations is not only relatively modest but also the relationship between parent's and child's aspirations does not necessarily mean that the child has actually acquired his or her aspiration directly from parents. Another plausible alternative is that parent-child agreement is not the result of socialization but rather is the result numerous common factors acting upon family members that leads to independent agreement.

SUMMARY

The occupational and educational status projections of these lower social strata fifth and sixth graders are more or less comparable to the levels of older youth.

Regression analysis of the antecedents of occupational and educational status projections reveal little difference by racial-residential categories, and differences by sex are presented.

Considerable spuriousness, interaction, and indirect effects among the variables point up the highly questionable nature of reliance upon measures of association in status projection research.

Occupational and educational status projections are found to have distinctly different sets of significant antecedents. Occupational projection is primarily contingent upon a small cluster of measures of the mother's aspirations and personal values for the child, and to a lesser extent, significant other influence. Educational projection, in contrast, is contingent not only upon the above variables but also upon the child's academic motivation, self-concept, and measured mental ability.

The mother's status projections serve as the key intervening variables mediating the indirect influence of other antecedent variables on the child's status projections. While this is supportive of recent findings reemphasizing the role of mother's influence on the child's projections, possible exaggeration of the relationship is cautioned against.

The high amount of measurement error and low amount of explained variance in occupational status projections reflect the common problem of ineffective use of survey techniques with young and less educated respondents (TenHouten, et. al., 1971), as well as a general problem in sociological research (Phillips, 1971). The lack of ability in explaining status projections with numerous independent variables, however, is far more than lack of precision in measurement and procedure.

Future analytical studies can be more productive in explaining status projections only when more sophisticated descriptive studies explicate the individual level of analysis rather than operationalizing aspirations as a cultural or normative phenomenon (see Yinger, 1965, Chapter 2). This is to say, current measurement of aspiration does not necessarily differentiate individuals in a manner congruent with traditional conceptualizations of aspiration as a "personal phenomenon, channelizing energy, motivation, and behavior in pursuit of a goal," (see Kuvlesky and Bealer, 1966; and Oberle and Campbell, 1971). There is a need to ascertain the extent to which occupational projections are based on "prestige" or on the "monetary rewards" aspects of high status occupational responses. Finally, such qualitative dimensions of occupational status orientation such as individual "knowledge of occupations," "awareness of alternative occupations," and "intensity of aspiration," need more attention if this incongruent state between conceptualization and operationalization is to be resolved and future research is to be more successful in explaining status projections.

Table 1. Brief Descriptive Profile

Socioeconomic and individual characteristics

Father's Occupational Status: mean NORC score = 53.0;
21.7% laborers, 21.5% no father or unemployed, 17.5% skilled craftsmen, 16.5% operators, 1.5% professional

Educational Status: father = 7.8 mean years;
mother = 8.9 mean years

Child's characteristics: Mean age = 11.2; Mean IQ = .87;
FST = 28.2%; mid-sibling = 53.1%

Status Projections

	Male		Female	
	Asp	Exp	Asp	Exp
OCC -- mean NORC score	68.2	65.1	71.7	69.1
ED - mode "finish college"	56.0%	38.5%	63.9%	40.0%

Qualitative difference in OCC by sex

	Male			Female	
	Asp	Exp		Asp	Exp
1. Athlete	7.7%	8.2%	1. Teacher	39.5%	30.5%
2. Doctor	6.8%	4.5%	2. Nurse	21.1%	16.5%
3. Teacher	6.3%	4.9%	3. Secretary	10.4%	8.5%
	20.8%	17.6%		71.0%	55.5%

Comparison of S-63 with Wisconsin Study

The ED variable was scored 1 to 7. The Sewell, Haller, Ohlendorf (1970) LEA used scores of 0, 1, and 2 for high school, vocational school and college. If we score S-63 categories 1-4 as 0, 5, and 6 as 1, and 7 as 2, then we can calculate an ED-LEA equivalent score for the groups. By fitting a line the conversion formula becomes: S-63 ED = 3.31 + 1.93 LEA. The Wisconsin total group had an average LEA of .833 which converted becomes a 4.92 ED score compared with 5.60 for all S-63 males.

Similarly, the Wisconsin LOA scores may be converted to scores comparable with S-63 OCC in accord with the formula: NORC = 54 + (.317) SES, where SES is Duncan's socioeconomic status score and NORC are the units of OCC in the present study. The formula was obtained by eye fitting to Figure 1. of Reiss (1963: 151). For Wisconsin high school seniors, the average OCC score would be 67 (converted from 40.429) while in S-63, the mean for all males was 66.7 (Source: Charles Proctor, Department of Experimental Statistics, North Carolina State University).

Table 2. Means for Variables by Sub-Grouping and Sex

		Sub-Grouping /a						F-values to test for		ALL	
No.	Name	UBB	UBG	RBB	RBG	RWB	RWG	SUB /b Diff	SEX /c Diff	Mean	(St. Dev.)
1	OCC	70	73	66	70	66	70	15.9	68.5	68.8	(± 9.4)
2	ED	6.0	6.2	5.6	5.7	5.4	5.5	27.5	3.9	5.67	(± 1.30)
3	AC	39	40	41	42	38	41	54.2	69.4	40.2	(± 4.1)
4	MED	5.6	5.6	5.5	5.6	5.6	5.4	1.1	0.0	5.53	(± 1.12)
5	MOC	74	72	68	71	69	70	33.7	6.3	70.5	(± 7.2)
6	SEL	67	70	67	69	65	67	11.7	19.4	67.2	(± 9.8)
7	FATK	1.2	.9	1.2	.9	1.3	1.0	4.2	53.0	1.11	(± .81)
8	MOTK	1.6	1.7	1.5	1.6	1.4	1.6	5.6	20.9	1.55	(± .62)
9	COM	3.4	3.4	3.1	3.2	3.7	4.0	39.3	3.2	3.2	(± 1.23)
10	PU	33	31	34	34	31	29	18.8	5.8	32.0	(± 9.9)
11	DM	53	54	52	53	50	52	12.4	17.0	52.1	(± 7.7)
12	LV	66	68	65	66	66	68	8.4	20.5	66.5	(± 7.4)
13	CHA	1.2	1.1	.8	.9	1.3	1.2	38.4	0.3	1.10	(± .74)
14	OUT	.9	.7	.9	.8	.9	.9	4.3	1.7	.87	(± .66)
15	FST	.21	.29	.23	.19	.37	.36	16.7	0.0	.283	(± .445)
16	IQ	88	89	79	79	92	95	261	5.9	87.4	(± 10.3)
17	ACM	28	27	23	24	26	26	76.6	1.2	25.5	(± 4.5)
18	ANO	.49	.55	.65	.66	.66	.64	10.6	0.2	.619	(± .460)
19	FBK	143	139	120	119	132	129	112	4.9	129.5	(± 20.8)
20	HOZ	6.8	6.6	8.0	8.3	5.8	5.7	146	0.0	6.81	(± 2.30)
21	NOH	.27	.35	.23	.22	.06	.09	43.4	1.9	.185	(± .377)
22	WEL	.36	.49	.24	.45	.34	.45	0.9	9.1	.382	(± .905)
23	MOG	38	38	40	40	38	38	9.2	0.0	38.5	(± 7.5)

/a UBB = Urban black boys, UBG = Urban black girls, RBB = Rural black boys, RBG = Rural black girls, RWB = Rural white boys, RWG = Rural white girls

/b If there are no differences among sub-groupings, this F statistic would exceed 4.6 1% of the time and 7.6 .05% of the time.

/c If there is no sex difference in means this F statistic would exceed 6.7 1% of the time and 12.2 .05% of the time.

Table 3. Tests of Homogeniety of Standardized Regression Coefficients: Significant Sub-Grouping Differences

Variables			Males			Variables			Females		
		UB	RB	RW	X^2			UB	RB	RW	X^2
OCC	on HOZ	-19	-04	06	6.02*	OCC	on MOTK	19	-10	-07	7.89**
ED	on WEL	02	10	-10	6.34**	ED	on HOZ	-26	03	-09	8.27*
	on LV	-15	17	08	6.36*		on FBK	33	09	03	7.49*
	on COM	12	01	-16	8.91*		on MED	-05	15	28	8.64*
	on SEL	22	-07	01	6.47*	AC	on COM	21	09	-11	12.16**
AC	on PU	-13	08	11	7.39*		on FATK	03	-08	20	10.60**
MED	on FBK	06	15	35	9.09*	MOC	on WEL	04	04	-19	7.61*
FATK	on CHA	-08	08	-16	6.47*	MOTK	on WEL	18	01	-22	14.48**
DM	on MOG	-08	05	-19	6.40*	FATK	on WEL	20	-04	-07	7.15*
PU	on HOZ	13	-09	17	9.08*	CHA	on ANO	-13	-14	12	7.28*
	on FBK	00	-12	15	6.25*	IQ	on FBK	01	17	40	18.16**
OUT	on NOH	14	-14	08	8.05*		on ACV	16	32	05	5.97*
ACV	on WEL	21	-04	-26	6.68*	FBK	on NOH	12	-13	10	7.60*
						ACV	on MOG	-13	-04	-28	9.44**

** = $p < .005$
** = $.006 > p < .01$
* = $.02 > p < .05$

Table 4. Step-Wise Regression of Male Occupational Status Projection (OCC) on Independent Variables

Independent Variables		Zero-Order r	Step-wise inclusion of blocks								
			X	IX	VIII	VII	VI	V	IV	III	II
Blocks											
II	3 AC	.092*	.089	.076	.061	.066	.022	.017	.020	.020	.023
III	4 MED	.176**	.166	.114	.095	.084	.087	.089	.090	.058	.056
	5 MOC	.228**	.227	.191	.176	.175	.172	.172	.172	.171	.172**
IV	6 SEL	.075*	.071	.059	.045	.041	-.008	-.007	-.008	-.007	-.014
V	7 FATK	.021	.020	.013	.004	.008	-.016	-.043	-.042	-.043	-.043
	8 MOTK	.134**	.132	.120	.105	.105	.081	.093	.093	.092	.090**
VI	9 COM	.106**	.098	.101	.087	.076	.034	.029	.029	.028	.026
	10 PU	.000	.004	.010	.023	.017	-.017	-.023	-.025	-.015	-.016
	11 DM	.111**	.107	.107	.110	.108	.083	.084	.085	.085	.082+
	12 LV	.107**	.102	.097	.088	.092	.035	.023	.025	.018	.017
VII	13 CHA	.082*	.080	.067	.064	.139	.138	.136	.136	.130	.131**
	14 OUT	.097**	.100	.081	.083	.146	.141	.140	.140	.130	.131**
VIII	15 FST	.071	.047	.064	.073	.077	.078	.073	.073	.063	.062
	16 IQ	.160**	.153	.106	.131	.125	.114	.105	.106	.070	.068
IX	17 ACV	.136**	.133	.090	.084	.065	.050	.047	.047	.025	.026
	18 ANO	-.108**	-.109	-.045	-.036	-.032	-.036	-.037	-.037	-.030	-.029
	19 FBK	.137**	.132	.104	.073	.054	.065	.063	.063	.012	.012
X	20 HOZ	-.079*	-.082	-.069	-.029	-.035	-.019	-.020	-.020	-.015	-.015
	21 NOH	.003	-.002	.006	.013	.007	.002	-.009	-.009	-.001	.000
	22 WEL	-.036	-.030	-.001	.005	.004	-.003	-.003	-.002	.000	-.001
	23 MOG	.011	.008	.042	.057	.049	.057	.057	.057	.062	.063

Partial correlation coefficients above diagonal; differences indicate spuriousness or masking.
Standardized regression coefficients below diagonal; differences indicate mediation effect.
Differences between adjacent r's and b's on the diagonal indicate interaction among variables in same block.

** = p ∠ .005   ** = .006 > p ∠ .01   * = .02 > p ∠ .05   + = .06 > p ∠ .10

Table 4a. Tests of Elaboration: Antecedents of Male Occupational Status Projection (OCC)

TEST		REDUCTION	INTERPRETATION
r1,3=.092	r1,3·4-23=.020	-.072*(-.044 via block VI)	spuriousness
r1,4=.176	r1,4·6-23=.090	-.086**(-.052 via block IX)	spuriousness
	b1,4·3-23=.058	-.032 (via block III)	
r1,5=.228	r1,5·6-23=.172	-.056+(-.036 via block IX)	spuriousness
	b1,5·4-23=.171	-.001	direct effect
r1,6=.075	r1,6·7-23=-.007	-.082*(-.049 via block VI)	spuriousness
r1,8=.134	r1,8·9-23=.081	-.053+(-.024 via block VI)	
	b1,8·7-23=.093	+.012	direct effect
r1,9-.106	r1,9·13-23=.076	-.030	
	b1,9·10-23=.034	-.042 (via block VI)	interaction
r1,11=.111	r1,11·13-23=.108	-.003	
	b1,11·9-23=.083	-.025	
	b1,11·3-23=.082	-.001	direct effect
r1,12=.107	r1,12·13-23=.092	-.015	
	b1,12·9-23=.035	-.057+(via block VI)	interaction
r1,13=.082	r1,13·15-23=.064	-.018	
	b1,13·14-23=.139	+.075*(via block VII)	masking
	b1,13·3-23=.131	-.008	direct effect
r1,14=.097	r1,14·15-23=.083	-.014	
	b1,14·13-23=.146	+.063$^+$ (via block VII)	masking
	b1,14·3-23=.131	-.015	direct effect
r1,16=.160	r1,16·17-23=.106	-.054$^+$ (-.047 via block IX)	spuriousness
	b1,16·15-23=.131	+.025	
	b1,16·3-23=.068	-.063$^+$ (-.036 via block III)	mediation, indirect effect
r1,17=.136	r1,17·20-23=.133	-.003	
	b1,17·18-23=.090	-.043 (via block IX)	interaction
	b1,17·3-23=.026	-.064$^+$ (-.022 block III)	mediation, indirect effect
r1,18= -.108	r1,18·20-23= -.109	+.001	
	b1,18·17-23= -.045	-.064$^+$ (via block IX)	interaction
	b1,18·3-23= -.029	-.016	
r1,19=.137	r1,19·20-23=.132	-.005	
	b1,19·17-23=.104	-.028	
	b1,19·3-23=.012	-.092**(-.082 via blocks III and VIII)	mediation, indirect effect
r1,20= -.079	b1,20·21-23= -.082	+.003	
	b1,20·3-23= -.015	-.067* (-.040 via block VIII)	mediation, indirect effect

Levels of significance for reduction:

$\underline{**} = p < .002$ $** = p < .02$ $* = p < .05$ $+ = p < .10$

Table 5. Step-Wise Regression of Female Occupational Status Projection (OCC) on Independent Variables

Independent Variables		Zero-Order r	Step-wise inclusion of blocks								
Blocks			X	IX	VIII	VII	VI	V	IV	III	II
II	3 AC	.089*	.088	.086	.079	.082	.063	.056	.042	.035	.040
III	4 MED	.083*	.079	.045	.034	.082	.037	.032	.030	-.006	-.009
	5 MOC	.179**	.178	.169	.150	.148	.147	.148	.147	.154	.152**
IV	6 SEL	.070+	.073	.072	.067	.072	.055	.053	.056	.055	.044
V	7 FATK	.094*	.108	.107	.106	.109	.103	.122	.120	.122	.120**
	8 MOTK	-.008	-.011	-.012	-.009	-.008	-.029	-.066	-.067	-.058	-.059
VI	9 COM	.094*	.097	.089	.074	.077	.068	.071	.067	.065	.062
	10 PU	.004	.044	.002	.007	-.004	.001	-.007	.010	.010	.012
	11 DM	.036	.038	.038	.043	.040	.006	.011	.001	.001	-.003
	12 LV	.050	.052	.047	.047	.048	.017	.014	.004	-.002	-.006
VII	13 CHA	.053	.051	.050	.040	.079	.082	.086	.087	.080	.080+
	14 OUT	.063+	.067	.048	.047	.083	.083	.087	.087	.085	.085*
VIII	15 FST	.087*	.096	.103	.108	.105	.105	.105	.103	.091	.092*
	16 IQ	.109**	.110	.081	.098	.088	.070	.061	.061	.027	.023
IX	17 ACV	.054	.054	.031	.026	.009	.004	.009	.005	.006	.007
	18 ANO	-.016	-.015	.031	.035	.039	.038	.040	.038	.035	.033
	19 FBK	.103**	.103	.109	.089	.082	.083	.031	.083	.078	.078
X	20 HOZ	-.009	.000	.014	.068	.061	.066	.067	.071	.067	.063
	21 NOH	.042	.054	.051	.063	.064	.068	.104	.106	.102	.100
	22 WEL	-.009	-.028	-.012	-.010	-.013	-.015	-.019	-.018	-.013	-.010
	23 MOG	-.007	-.009	.015	.045	.040	.036	.040	.040	.039	.041

Partial correlation coefficients above diagonal; differences indicate spuriousness or masking.
Standardized regression coefficients below diagonal; differences indicate mediation effect.
Differences between adjacent r's and b's on the diagonal indicate interaction among variables in same block.

** = p ∠ .005 ** = .006 > p ∠ .01 * = .02 > p ∠ .05 + = .06 > p ∠ .10

Table 5a. Tests of Elaboration: Antecedents of Female Occupational Status Projection (OCC)

TEST		REDUCTION	INTERPRETATION
r1,3-.089	r1,3·4-23=.035	-.054	spuriousness
	b1,3·4-23=.040	+.005	
r1,4=.083	r1,4·6-23=.030	-.053+ (-.034 via block IX)	spuriousness
	b1,4·5-23=-.006	-.036	
	b1,4·3-23=-.009	-.003	
r1,5=.179	r1,5·6-23=.147	-.032	
	b1,5·4-23=.154	+.007	
	b1,5·3-23=.152	-.002	direct effect
r1,6=.070	r1,6·7-23=.053	-.017	
	b1,6·8-23=.056	+.003	
	b1,6·3-23=.044	-.012	
r1,7=.094	r1,7·9-23=.103	+.009	
	b1,7·8-23=.122	+.019	
	b1,7·3-23=.120	-.002	direct effect
r1,9=.094	r1,9·13-23=.077	-.022 (-.015 block VIII)	
	b1,9·10-23=.068	-.009	
	b1,9·3-23=.062	-.006	
r1,13=.053	r1,13·15-23=.040	-.013	
	b1,13·14-23=.079	+.039	masking
	b1,13·3-23=.080	+.001	direct effect
r1,14=.063	r1,14·15-23=.047	-.016	
	b1,14·13-23=.083	+.036	masking
	b1,14·3-23=.085	+.002	direct effect
r1,15=.087	r1,15·17-23=.103	+.016	masking
	b1,15·16-23=.108	+.005	
	b1,15·3-23=.092	-.016	direct effect
r1,16=.109	r1,16·17-23=.081	-.028 (-.029 via block IX)	
	b1,16·15-23=.098	+.017	
	b1,16·3-23=.023	-.075* (-.018 block VI, -.034 block III)	mediation, indirect effect
r1,19=.103	r1,19·20-23=.103	.000	
	b1,19·17-23=.109	+.006	
	b1,19·3-23=.078	-.031	
r1,21=.042	r1,21·20-23=.054	+.012	masking
	b1,21·3-23=.100	+.046 (+.036 block VI)	direct effect

Levels of significance for reduction:

** = p ∠ .002 ** = p ∠ .02 * = p ∠ .05 + = p ∠ .10

Table 6. Step-Wise Regression of Male Educational Status Projection (ED) on Independent Variables

Independent Variables Blocks		Zero Order r	Step-wise inclusion of blocks X	IX	VIII	VII	VI	V	IV	III	II
II	3 AC	.351**	.347	.338	.313	.315	.270	.266	.244	.237	.260**
III	4 MED	.290**	.271	.210	.179	.175	.180	.180	.175	.160	.135**
	5 MOC	.212**	.200	.141	.114	.114	.110	.110	.114	.078	.089*
IV	6 SEL	.227**	.226	.215	.187	.186	.128	.112	.117	.110	.029
V	7 FATK	.180**	.164	.160	.154	.155	.122	.121	.105	.103	.103**
	8 MOTK	.100**	.099	.084	.060	.060	.014	-.020	-.023	-.021	-.038
VI	9 COM	.105**	.101	.110	.080	.076	-.009	-.015	-.024	-.024	-.041
	10 PU	.008	.009	.018	.048	.046	.003	.005	.030	.030	.023
	11 DM	.150**	.147	.151	.162	.161	.090	.083	.070	.079	.044
	12 LV	.195**	.192	.193	.173	.175	.119	.107	.071	.065	.046
VII	13 CHA	.054	.055	.039	.040	.054	.057	.060	.057	.039	.053
	14 OUT	.050	.051	.022	.022	.046	.036	.050	.044	.032	.045
VIII	15 FST	.035	-.011	.006	.011	.012	.014	.007	.011	.001	.004
	16 IQ	.283**	.271	.216	.254	.252	.240	.239	.227	.187	.159**
IX	17 ACV	.164**	.140	.066	.042	.035	.008	.009	.013	-.015	-.005
	18 ANO	-.119**	-.111	-.033	-.014	-.013	-.022	-.016	-.015	-.003	-.004
	19 FBK	.230**	.202	.187	.126	.120	.133	.132	.127	.074	.070
X	20 HOZ	-.047	-.054	-.033	-.016	-.017	-.004	-.007	-.005	-.010	-.010
	21 NOH	-.065+	-.045	-.035	-.029	-.030	-.041	-.008	-.007	.004	.010
	22 WEL	-.105**	-.084	-.047	-.042	-.042	-.040	-.037	-.042	-.037	-.040
	23 MOG	-.070+	-.068	-.020	-.028	-.031	-.022	-.021	-.022	-.020	-.006

Partial correlation coefficients above diagonal; differences indicate spuriousness or masking.
Standardized regression coefficients below diagonal; differences indicate mediation effect.
Differences between adjacent r's and b's on the diagonal indicate interaction among variables in same block.

** = $p < .005$ ** = $.006 > p < .01$ * = $.02 > p < .05$ + = $.06 > p < .10$

Table 6a. Tests of Elaboration: Antecedents of Male Educational Status Projection (ED)

TEST		REDUCTION	INTERPRETATION
r2,3=.351	r2,3·4-23=.237	-.114**(-.045 via block VI)	spuriousness
	b2,3·4-23=.260	+.023	direct effect
r2,4=.290	r2,4·6-23=.175	-.115**(-.061 via block IX, .031 block VIII)	spuriousness
	b2,4·5-23=.160	-.015	
	b2,4·3-23=.135	-.025	direct effect
r2,5=.212	r2,5·6-23=.114	-.098**(-.059 block IX, .027 block VIII)	spuriousness
	b2,5·4-23=.078	-.036	
	b2,5·3-23=.089	+.011	direct effect
r2,6=.227	r2,6·7-23=.112	-.114**(-.028 block VIII, .058 block VI)	spuriousness
	b2,6·3-23=.029	-.088**(-.081 block II)	mediation, indirect effect
r2,7=.180	r2,7·9-23=.122	-.058^{+}(-.033 block VI)	
	b2,7·8-23=.121	-.001	
	b2,7·3-23=.103	-.018	direct effect
r2,8=.100	r2,8·9-23=.014	-.086**(-.046 block VI)	spuriousness
	r2,8·7-23=-.020	-.034	
	b2,8·3-23=-.038	-.018	
r2,9=.105	r2,9·13-23=.076	-.029	
	b2,9·10-23=.099	-.067*(via block VI)	interaction
	b2,9·2-23=-.041	-.050	
r2,11=.150	r2,11·13-23=.161	+.011	
	b2,11·9-23=.090	-.071*(via block VI)	interaction
	b2,11·3-23=.044		
r2,12=.195	r2,12·13-23=.175	-.020	
	b2,12·9-23=.119	-.051 (via block VI)	interaction
	b2,12·3-23=.046	-.065^{+}(-.036 block IV)	mediation, indirect effect
r2,16=.283	r2,16·17-23=.216	-.067*(-.045 block IX)	spuriousness
	b2,16·15-23=.250	+.035 (block VIII)	
	b2,16·3-23=.159	-.091**(-.040 block III, .028 block II)	mediation, indirect effect direct effect
r2,17=.164	r2,17·20-23=.140	-.024	
	b2,17·18-23=.066	-.074*(block IX)	interaction
	b2,17·3-23=-.005	-.071*(-.028 block VI, -.028 block III)	mediation, indirect effect
r2,18=-.119	r2,18·20-23=-.111	-.008	
	b2,18·17-23=-.033	-.078* (block IX)	interaction
	b2,18·3-23=.004	+.037	

(Continued)

(Table 6a. Continued)

TEST		REDUCTION	INTERPRETATION
r2,19=.230	r2,19·20-23=.202	-.028	
	b2,19·17-23=.187	-.015	
	b2,19·3-23=.070	-.117$\underline{**}$(-.061$^+$ block VIII, -.053$^+$ block III)	mediation, indirect effect
r2,21=-.065	r2,21·20-23=-.045	-.020	
	b2,21·3-23=.010	+.050	
r2,22=-.105	r2,23·20-23=-.084	-.021	
	b2,23·3-23=-.040	-.044 (-.037 block IX)	
r2,23=-.070	r2,23·20-23=-.068	-.002	
	b2,23·2-23=-.006	-.064$^+$ (-.048 via block IX)	mediation, indirect effect

Levels of significance for reduction:

$\underline{**}$ = $p < .002$ ** = $p < .02$ * = $p < .05$ + = $p < .10$

Table 7. Step-Wise Regression of Female Educational Status Projection (ED) on Independent Variables

Independent Variables		Zero-Order r	Step-wise inclusion of blocks								
Blocks			X	IX	VIII	VII	VI	V	IV	III	II
II	3 AC	.198**	.196	.201	.187	.187	.160	.157	.132	.117	.127**
III	4 MED	.302**	.274	.204	.190	.192	.199	.196	.194	.187	.179**
	5 MOC	.147**	.136	.114	.090	.091	.089	.092	.091	.046	.042
IV	6 SEL	.162**	.152	.154	.152	.151	.110	.109	.112	.105	.070+
V	7 FATK	.045	.047	.046	.044	.044	.041	.032	.029	.019	.011
	8 MOTK	.053	.041	.042	.052	.052	.032	.020	.017	.012	.010
VI	9 COM	.147**	.142	.125	.099	.098	.077	.074	.067	.077	.067+
	10 PU	-.098**	-.093	-.099	-.094	-.094	-.096	-.099	-.067	-.065	-.059
	11 DM	.037	.047	.046	.050	.048	.042	.042	.021	.032	.019
	12 LV	.086*	.080	.067	.058	.057	-.006	-.015	-.035	-.038	-.054
VII	13 CHA	-.011	-.005	-.015	-.024	-.020	-.006	-.005	-.002	-.015	-.015
	14 OUT	.077*	.075	.021	.016	.006	.017	.018	.019	.017	.019
VIII	15 FST	.029	-.048	-.033	-.039	-.038	-.040	-.041	-.046	-.051	-.050
	16 IQ	.248**	.224	.149	.183	.184	.160	.162	.161	.123	.112**
IX	17 ACV	.198**	.169	.082	.054	.056	.049	.049	.040	.031	.036
	18 ANO	-.136**	-.116	-.011	-.009	-.009	-.006	-.000	-.011	-.016	.022
	19 FBK	.277**	.246	.227	.184	.182	.186	.185	.188	.127	.129**
X	20 HOZ	-.140**	-.147	-.110	-.111	-.108	-.097	-.095	-.088	-.078	-.090*
	21 NOH	.034	.049	.045	.045	.047	.052	.059	.064	.048	.040
	22 WEL	-.065+	-.076	-.031	-.025	-.026	-.030	-.029	-.026	-.011	-.003
	23 MOG	.086*	.088	.030	.043	.043	.054	.053	.053	.048	.040

Partial correlation coefficients above diagonal; differences indicate spuriousness or masking.
Standardized regression coefficients below diagonal; differences indicate mediation effect.
Differences between adjacent r's and b's on the diagonal indicate interaction among variables in same block.

** = $p < .005$ ** $= .006 > p < .01$ * $= .02 > p < .05$ + $= .06 > p < .10$

Table 7a. Tests of Elaboration: Antecedents of Female Educational Status Projection (ED)

TEST		REDUCTION	INTERPRETATION
r2,3=.198	r2,3·4-23=.117	-.082*(-.027 block VI, -.025 IV)	spuriousness
	b2,3·4-23=.127	+.010	direct effect
r2,4=.302	r2,4·6-23=.194	-.108**(-.028, block X -.070* block IX)	spuriousness
	b2,4·5-23=.187	-.007	
	b2,4·3-23=.179	-.008	direct effect
r2,5=.147	r2,5·6-23=.091	$-.056^{+}$(-.022 block IX, -.024 block VIII)	spuriousness
	b2,5·4-23=.046	-.045 (block III)	interaction
	b2,5·3-32=.042	-.002	
r2,6=.162	r2,6·7-23=.109	$-.053^{+}$ (-.041 block V!)	spuriousness
	b2,6·7-23=.112		
	b2,6·3-32=.070	-.042 (-.035 block II)	
r2,9= .147	r2,9·13-23=.098	-.049	
	b2,9·10-23=.077	-.021	
	b2,9·3-23=.067	-.010	direct effect
r2,10=-.098	r2,10·13-23=-.094	-.004	
	b2,10·9-23=-.096	+.002	
	b2,10·3-23=-.059	-.037 (-.032 block IV)	
r2,12=.086	r2,12·13-23=.057	-.029	
	b2,12·9-23=-.006	$-.063^{+}$ (block VI)	interaction
	b2,12·3-23=-.054	-.048 (-.020 block V)	
r2,14=.077	r2,14·15-23=.016	$-.061^{+}$ (-.054 block IX)	spuriousness
	b2,14·13-23=.006	-.010	
	b2,14·3-23=.019	+.013	
r2,16=.248	r2,16·17-23=.149	-.099** (-.075* block IX)	spuriousness
	b2,16·15-23=.183	+.032	
	b2,16·3-23=.112	-.072 (-.024 block VI, -.038 block III)	indirect effect direct effect
r2,17=.198	r2,17·20-23=.169	-.029	
	b2,17·18-23=.082	-.087**	interaction
	b2,17·3-32=.036	-.046 (-.028 block VIII)	
r2,18=.136	r2,18·20-23=-.116	-.020	
	b2,18·17-23=-.001	-.105	interaction
	b2,18·3-23=-.022	+.011	
r2,19=.277	r2,19·20-23=.246	-.031	
	b2,19·17-23=.227	-.019	
	b2,19·3-23=.129	-.098**(-.043 block VIII, $-.061^{+}$ block III)	mediation indirect effect direct effect
r2,20-.140	b2,20·21-23=-.147	+.007	
	b2,20·3-23=-.090	$-.057^{+}$ (-.037 block IX)	mediation indirect effect direct effect

(Continued)

(Table 7a. Continued)

TEST		REDUCTION	INTERPRETATION
$r_{2,22}=-.065$	$b_{2,22\cdot 20-23}=-.076$	+.011	
	$b_{2,22\cdot 3-23}=-.003$	-.073* (-.045 block IX)	mediation indirect effect
$r_{2,23}=-.086$	$b_{2,22\cdot 20-22}=-.088$	+.002	
	$b_{2,22\cdot 3-23}=-.040$	-.044 (-.044, -.058^{+} block IX)	mediation indirect effect

Level of significance for reduction:

$\underline{**} = p < .002$ $** = p < .02$ $* = p < .05$ $+ = p < .10$

Table 8.
Summary of Significant Antecedents
of Occupational (OCC) and Educational (ED) Status Projections

	Males		Females	
	direct effects	indirect effects	direct effects	indirect effects
OCC				
	MOC	IQ via MOC	MOC	IQ via MOC, COM
	MOTK	ACV via MOC	FATK	
	CHA	FBK via MOC, IQ	CHA	
	OUT	-HOZ via IQ	OUT	
			FST	
			NOH	
ED				
	AC	SEL via AC*	AC	
		LV via SEL		
	MED	IQ via MED	MED	
	MOC	ACV via MED, DM	COM	IQ via MED, COM
	FATK	FBK via COM*, LV*, MED*	IQ	
	IQ	-MOG via FBK	FBK	FBK via IQ, MED* -HOZ via FBK -WEL via FBK -MOG via FBK*

NOTE: In considering indirect effects, the first variable is the antecedent with the effect and the second variable is the intervening variable mediation must of the effect. Where an asterisk appears with the intervening variable this indicates that the amount of indirect effect mediated by it alone is statistically significant.

Table 9. Standardized Regression Coefficients for Males

	Independent Variables										
Dependent Variables	2 ED	3 AC	4 MED	5 MOC	6 SEL	7 FATK	8 MOTK	9 COM	10 PU	11 DM	12 LV
1 OCC	(15*)	02	06	17*	-01	-04	09+	03	-02	08	02
2 ED		26*	14*	09+	03	10*	-04	-04	02	04	05
3 AC			10+	-04	31*	00	06	07	03	13*	07
4 MED				(23*)	06	01	-02	-01	03	-06	02
5 MOC					-03	01	02	01	-07	02	03
6 SEL						14*	02	08+	-21*	11+	31*
7 FATK							(28*)	06	00	06	13*
8 MOTK								09+	07	01	20*
9 COM									(04)	(33*)	(41*)
10 PU										(36*)	(06)
11 DM											(52*)
12 LV											
13 CHA											
14 OUT											
15 FST											
16 IQ											
17 ACV											
18 ANO											
19 FBK											

Partial correlation coefficients in parentheses.

* = $p < .005$ + = $.006 > p < .05$

Table 9. Continued

	Independent Variables										
Dependent Variables	13 CHA	14 OUT	15 FST	16 IQ	17 ACV	18 ANO	19 FBK	20 HOZ	21 NOH	22 WEL	23 MOG
1 OCC	13*	13*	06	07	03	-03	01	-02	00	-00	06
2 ED	05	05	00	16*	-01	00	07	01	01	-04	-01
3 AC	-05	-05	-01	11+	-04	-03	01	00	-02	01	-06
4 MED	12*	05	04	18*	14+	-07	23*	-10+	-05	-03	00
5 MOC	-00	04	05	14*	08	-02	22*	01	-03	-00	-03
6 SEL	03	05	-04	10+	-03	-00	05	-01	-00	04	01
7 FATK	-02	-04	08	03	-00	-05	01	03	-27*	-01	-01
8 MOTK	01	-00	08+	11+	03	-01	04	01	-00	06	-00
9 COM	04	11+	-01	19+	04	00	-15*	-18*	-03	05	-06
10 PU	02	07	03	-17*	-03	-03	01	07	08	-04	-05
11 DM	02	03	02	-04	09+	02	-04	-07	07	-02	-07
12 LV	-04	-01	-04	16*	15*	06	-09	-08	02	-01	-03
13 CHA		(-49*)	-00	04*	17*	08	01	01	01	-01	09+
14 OUT			-03	00	-03	-11+	12+	03	03	02	-03
15 FST				(-02)	-09	02	-01	-45*	-05	-04	-28*
16 IQ					09+	-08+	24*	-05	-02	-02	04
17 ACV						(-52*)	(37*)	-02	-01	-16*	-12+
18 ANO							(-28*)	00	07	02	05
19 FBK								-11*	-04	-14*	-20+

Partial correlation coefficients in parentheses.

* = $p < .005$ + = $.006 > p < .05$

Table 10. Standardized Regression Coefficients for Females

Dependent Variables	Independent Variables 2 ED	3 AC	4 MED	5 MOC	6 SEL	7 FATK	8 MOTK	9 COM	10 PU	11 DM	12 LV
1 OCC	(17*)	04	-01	15*	04	12*	-06	06	01	-00	-01
2 ED		13+	18+	04	07	01	01	07	-06	02	-05
3 AC			06	03	28*	07	02	08+	-05	10+	12*
4 MED				(25*)	03	05	04	-06	-01	-06	01
5 MOC					01	-01	-06	01	-01	-00	04
6 SEL						03	03	06	-29*	19*	18*
7 FATK							(30*)	03	06	-02	14*
8 MOTK								10+	02	03	22*
9 COM									(-05)	(35*)	(39*)
10 PU										(21*)	(-06)
11 DM											(56*)
12 LV											
13 CHA											
14 OUT											
15 FST											
16 '											
17 ACV											
18 ANO											
19 FBK											

Partial correlation coefficients in parentheses.

* = $p < .005$ + = $.006 > p < .05$

Table 10. Continued

Dependent Variables	Independent Variables 13 CHA	14 OUT	15 FST	16 IQ	17 ACV	18 ANO	19 FBK	20 HOZ	21 NOH	22 WEL	23 MOG
1 OCC	08	09+	09+	02	01	03	08	06	10+	-01	04
2 ED	-01	02	-05	11+	04	-02	13*	-09	04	-00	-04
3 AC	-00	-02	-02	09+	-04	04	-02	09+	06	-06	-06
4 MED	05	01	01	15*	05	02	32*	-06	08	-07	-03
5 MOC	05	02	08	23*	-00	02	05	02	03	04	00
6 SEL	-03	-01	04	01	08	04	-03	-06	-04	-02	00
7 FATK	-03	-04	02	01	-02	01	03	-02	-26*	00	-04
8 MOTK	-00	-02	03	-11+	05	05	00	-03	07	-05	-02
9 COM	-03	-02	01	25*	07	01	-02	-05	-05	01	06
10 PU	12+	13*	-02	-07	01	05	01	09+	01	-00	-09+
11 DM	-01	08+	-03	-04	06	03	-02	02	-03	08	-04
12 LV	-06	04	-04	07	01	-02	02	-07	-05	04	-02
13 CHA		(-47*)	04	09	11+	-01	-06	11+	08	-02	02
14 OUT			-01	04	11+	-04	14*	-03	-08	06	04
15 FST				(03)	12+	-01	-04	08+	07	-03	01
16 IQ					13*	-02	23*	-09+	-02	-03	01
17 ACV						(-54*)	(42*)	-11*	-02	-10+	-14*
18 ANO							(-31*)	08+	03	12*	06
19 FBK								-12*	02	-16*	-20*

Partial correlation coefficients in parentheses.

* = $p < .005$ + = $.006 > p < .05$

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SELF-IMAGE, GOAL BLOCKAGE, SIGNIFICANT OTHER INFLUENCE, AND ANTICIPATORY OCCUPATIONAL GOAL DEFLECTION*

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SELF-IMAGE, GOAL BLOCKAGE, SIGNIFICANT OTHER INFLUENCE, AND ANTICIPATORY OCCUPATIONAL GOAL DEFLECTION

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Research into the occupational choice process and the occupational status projections of adolescents has a long history well catalogued by Kuvlesky and Ohlendorf (1967). Occupational choice is most often researched by sociologists as a developmental process (Ginzberg, et al., 1951; Blau, et al., 1956; Super, 1957; Rodgers, 1966; Musgrave, 1967). This perspective maintains that as the individual matures, he goes through a series of stages during which his occupational choice becomes more realistic. It is theorized that occupational choice starts fairly early in a child's life and continues on into adulthood.

Two of the elemental concepts which have received extensive treatment in the study of occupational choice are aspirations and expectations. These two dimensions have been conceptually differentiated by a number of authors (Blau, et al., 1956; Stephension, 1957; Glick, 1963; Kuvlesky and Bealer, 1966; Rehberg, 1967). For Kuvlesky and Bealer, three components of aspiration are delineated: (1) a chooser or selector element; (2) a wanting or desiring element; and (3) an occupational goal element. There are also three components delineated for expectations: (1) a chooser or selector element; (2) an expectation or anticipation element; and (3) an occupational role. The primary difference between the two concepts is found in the orientation toward an occupation. A person's occupational aspiration is generally thought to be either postive or negative; the person need not necessarily desire the occupation which he actually expects (as opposed to aspires) to enter.

When aspirations and expectations are viewed as separable and conceptually distinguishable, then it is also possible to study any difference that exists between the two concepts. The difference that exists has been termed "anticipatory occupational goal deflection" (Kuvlesky, 1966; Kuvlesky and Bealer, 1966). This difference was also noted in an earlier paper by Glick (1963) in which he discussed "anticipatory occupational frustration." In either case, what can be studied is the observed difference, if any, that occurs between aspirations and expectations. If the person has a higher aspiration than expectation, then he is said to have negative deflection. He is said to have positive deflection when his expectation is higher than his aspiration (Ohlendorf and Kuvlesky, 1968).

While there has been voluminous research on the general topic of occupational choice, and consequently on that part of the status attainment process, there is a marked absence of research which integrates the goal deflection variable into the study of the status attainment process. Many researchers studying the status attainment process have given attention to variables which are antecedent to status attainment. Examples of these are such sociological factors as family size, socio-economic status, place of residence, mental ability, etc. (For an extensive bibliography of these references, see Kuvlesky and Reynolds, 1970). However, only in recent years has Anticipatory Occupational Goal Deflection (AOGD) become a focus for research, and its explanatory power, as a component of the status attainment process, has yet to be fully discussed or realized.

Researchers have empirically demonstrated that AOGD is a measurable phenomenon (Slocum 1956; Glick, 1964; Nunalee and Drabick, 1965; Ameen, 1967; Ohlendorf and Kuvlesky, 1968; Lever, 1969; Kuvlesky, Wright, and Juarez, 1969; Cosby, 1970; Curry, 1970; Cosby and Picou, 1971; Curry and Picou, 1971). A summary of the findings of these studies was reported in Curry and Picou (1971) and we cite it here:

1. AOGD has occurred among 33-45% of the respondents sampled.
2. Negative AOGD occurs more often than positive AOGD.
3. Significant differences in proportions of youth experiencing AOGD are not to be found between races or sexes.
4. An inverse relationship appears to exist between S.E.S. and AOGD.

PROBLEM

While there has been some empirical work which demonstrated the existence of AOGD, there has been very little research reported which attempted to explain the dynamics of AOGD; this was borne out by the fact that most of the studies reported had limited their analyses to one-wave data sets and descriptive statistics. Only two studies of which we were aware report analysis based on multivariate techniques (Han, 1969; Curry and Picou, 1971), and then the explanations were only partial. For the purpose of this paper, the most relevant model developed thus far was that reported by Curry and Picou (1971).

The Curry-Picou model utilized two multi-variate techniques -- least squares analysis of variance and path analysis -- to analyze data collected on a sample of rural Louisiana high school seniors. The model developed used two exogenous variables -- father's education and breadwinner's occupation -- and one endogenous variable -- goal impedance -- in an attempt to explain AOGD (the dependent variable). As the authors stated, the path diagrams indicated that "these models possess relatively little explanatory power..." (Curry and Picou, 1971: 326). In fact, only three percent of the total variance was explained by the model.

The problem of the present research was to experiment with and expand the Curry-Picou model by introducing a set of additional explanatory variables. Experimentation with the extended model was carried out by applying it to a three-wave rural youth panel. This allowed an estimate of the power of the model successively at the sophomore, senior, and post high school periods. Thus, the task addressed here was (1) to expand the Curry-Picou model and (2) to apply the model at three different developmental phases.

DATA COLLECTION

The data utilized in this analysis were obtained from a three-wave panel of East Texas rural youth over a six-year period. The panel utilized in the present study consisted of 134 males. Data collecttion procedures for each wave were as follows:

(a) Wave I (Spring, 1966). Group-administered questionnaires were given to all tenth-grade high school students present the day of the interview. The high schools selected were in three counties which were classified as 100% rural according to the 1960 census.

(b) Wave II (Spring, 1968). A second contact was made with the respondents previously interviewed in 1966. The majority of the Wave II data was collected by again using group-administered interview schedules with the items contained in this period worded the same as the previous period. Attempts were also made to contact those respondents who had either moved from their original counties or who had dropped out of school, personal interviews and/or mailed questionnaires were used with these respondents. Eighty-nine percent of the Wave I panel was interviewed by these combined techniques. Panel attrition was largely attributed to scholastic dropouts -- approximately one-half of the Wave II losses were high school drop-outs.

(c) Wave III (Summer-Fall, 1972). The third contact was made in 1972 when the original respondents were four years beyond expected high school completion. These measures for this period were primarily obtained by personal interview. Mailed questionnaires and telephone interviews were used for a minority (15%) of the respondents who were not interviewed by the primary method. Approximately 92% of the Wave II panel were recontacted by all methods. The principal cause of panel attrition appeared to be out-of-state migration and military service.

VARIABLES

Main Breadwinner's Occupation (X_1). This background variable was a rating of the main breadwinner's occupation -- be the main breadwinner mother, father, aunt, grandfather, or whomever -- as measured on the socioeconomic index developed by Duncan (1961).

Race (X_2). This was quantified as white = 1 and black = 2.

Family Structure (X_3). This was operationalized as a dichotomous variable so that both parents alive and living together was scored as a 1; all others were scored as a 2.

Birth Order (X_4). This was defined such that first born and only child = 1, all others = 2.

Goal Blockage (X_5). This consisted of asking the respondent the question, "How much effect do you think each of the following things will have in keeping you from getting the job you desire?" The items then listed were:

1. Not enough money to go to technical school or college.
2. The school I have gone to.
3. Lack of parents' interest.
4. My race.
5. Don't want to move.
6. Good jobs are getting too scarce in the U.S.
7. Lack of good job opportunities in or near my community.
8. No technical school or college nearby.
9. Don't know enough about the opportunities that exist.
10. Not smart enough.

For each item a response ranging in strength from 1 to 4 was given thus yielding an aggregate score for the ten items ranging from a possible low of 10 to a possible high of 40.

Significant other Influence (X_6). This consisted of asking the repondent the question: "How helpful have each of the following people and things been in helping you to decide what job you would most like to have?" Only the responses for parents, friends, high school counselors, teachers, and relatives other than parents were used. This yielded an aggregate score which could range from a possible low of 5 to a possible high of 20.

Self Image (X_7). This was ascertained by asking the respondent about five aspects of three dimensions of self-image. The dimensions and their corresponding aspects were: (1) physical status -- energetic, strong, attractive, athletic, graceful; (2) academic ability -- talented, successful, thorough, capable, intelligent; and (3) social relations -- cooperative, dynamic, accepted, popular, self-confident. Possible aggregate scores ranged from a low of 15 to a high of 45, depending on agreement with the items.

Anticipatory Occupational Goal Deflection (X_8). The Duncan index was used to assign scores to the respondents stated aspirations and expectations. These could range from a low of 1 to a high of 99. The real difference between these constituted AOGD and could range from -98 to to +98.

Not all of the variables were measured at three points in time. Main breadwinner's occupation, race, family structure, and birth order were all determined in 1966 and then held as constants. Items on self-image were only obtained in 1966 and thus information on this variable was only available at one point in time. Data was collected on all other variables at each of the three points in time.

THE MODEL

As stated previously in this report, the task undertaken was to extend the Curry-Picou Goal Deflection Model by introducing additional variables. It was anticipated that by including new background variables such as race, family structure, and birth order a more comprehensive assessment of the effects of disparity in background on both the intervening social psychological variables and AOGD could be ascertained. Thus it was expected that each background variable would potentially exert both an indirect effect upon AOGD through the various intervening variables and a direct effect upon AOGD. Second, two additional intervening variables (significant other influence and self-image), that potentially would mediate the influence of the background variable on AOGD, were also introduced. The inclusion of significant other influence, self-image, and goal blockage had been earlier theorized by Kuvlesky (1970) as perhaps influencing AOGD. The modifications of the Curry-Picou Model resulted in the more complex path digram presented in Figure 1.

Thus, several assumptions were made: (A) the various background variables (X_1, X_2, X_3, and X_4) were assumed to be antecedent to both the intervening variables (X_5, X_6, and X_7) and to AOGD (X_8); (B) there was a one-directional influence between variables, therefore, no reciprocal relationships were analyzed; (c) residual variables were not intercorrelated; (D) all relationships between variables were linear and additive; and (E) the assumptions necessary for standard multiple regression were made.

LIMITATIONS

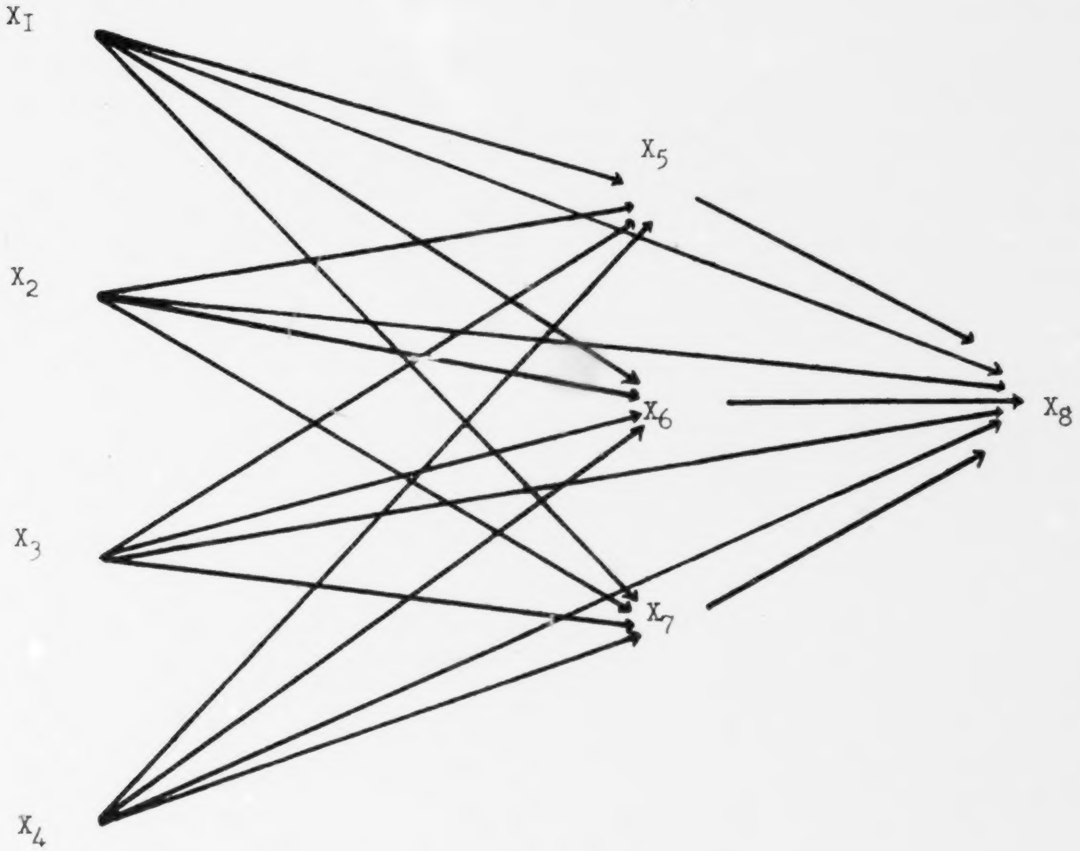
Generalizations of findings and interpretations reported in this paper should be made with caution for several apparent reasons. First, the sample design used to obtain the subjects in the panel was based on purposed procedures. Schools in three 100% rural Texas counties were selected with the intent of focusing on rural youth. While this obviously was not in itself a limitation, generalization to broader populations has no scholastic base and thus is a risky endeavor.

Second, the use of path analytic procedures carried with it the usual limitations. For example, attention should be drawn to the three causal paths between goal blockage, significant other influence, self-image and AOGD. The model assumes that the first three (X_5, X_6, X_7) were antecedent to AOGD (X_8) and that there were no effects between X_5, X_6, and X_7. In both cases the assumption can easily be questioned. Futhermore, it was apparent that other path arrangements would have been equally plausible. For example, it is not difficult to think of AOGD being antecedent to and exerting a causal effect on self-image.

Third, the items used to solicit information on self-image and significant other influence have dubious face validity. That the self-image items were Likert-type, forced-choice items well illustrates the limited nature of the questions asked. We know that self-image is a far more complex phenomenon than the questions could hope to ascertain; thus the

FIGURE I

THE MODIFIED OCCUPATIONAL GOAL DEFLECTION MODEL



X_I - MAIN BREADWINNER'S OCCUPATION

X_2 - RACE

X_3 - FAMILY STRUCTURE

X_4 - BIRTH ORDER

X_5 - GOAL BLOCKAGE

X_6 - SIGNIFICANT OTHER INFLUENCE

X_7 - SELF IMAGE

X_8 - ANTICIPATORY OCCUPATIONAL GOAL DEFLECTION limited nature of the questions' validity. Additionally, self-image was not measured at three points in time. We had data on self-image only as measured when the respondents were approximatly age 16 and sophomores in high school. While this was a limitation, it also provided a test of the effect of self-image measured at one point in time upon AOGD observed at three different points.

The limitation to the significant other influence item was with the limited nature of the question asked. The question did not really ascertain how much of an influence the significant other may have been. Other researchers (Sewell, Haller and Portes, 1969; Sewell, Haller, and Ohlendorf, 1971) have shown the potential importance of significant other influence and present research by Haller has begun to indicate the complexity of this variable. Thus, our measure of significant other influence was superficial, at best.

RESULTS

Our results will be discussed in three ways: (1) relationships between exogenous variables and endogenous variables; (2) relationships between exogenous variables and the dependent variable, AOGD; and (3) relationships between the endogenous variables and the dependent variable, AOGD. The discussion of relationships somewhat extraneous to our primary interests will be found in the following section, "Discussion."

Even a cursory examination of the model constructed for 1966 reveals the rather generally weak relationships between all variables. Only two relationships between exogenous and endogenous variables were found to be significant, and both of these had race as the exogenous variable. The relationship between race and significant other influence did obtain statistical significance and the relationship between race and self-image was statistically significant.

As one would expect given the weak individual relationships, the total explained variance for the endogenous variables and the dependent variable was also small. The effect of all exogenous variables on goal blockage could only explain three percent of the variance. Similarly only nine percent of the variance observed for significant other influence and seven percent for self-image could be explained by the total effect of the exogenous variables. The total explained variance of the dependent variable, considering all exogenous and endogenous effects, was only one percent; the best example of the seemingly weak explanatory power of the model.

For the model constructed using 1968 data where possible, again, little explanatory power was evident. However, certain observations about the model are warranted. Race was again found to be of statistical significance, however somewhat differently than in the 1966 model. A highly significant statistical relationship was found between race and goal blockage; this relationship was not observed in the 1966 model. However, the relationship which was observed in the 1966 model between race and significant other influence was absent from the 1968 model. Another relationship of statistical significance which was observed was that between birth order and goal deflection; a relationship with a negative value. Aside from the relationships just mentioned, the remainder of the relationships were again weak. However, one additional comment is in order. While the total explained variance for significant other influence decreased from 1966 to 1968, the total explained variance for goal blockage did increase. Perhaps of greater importance was that the increase in the total effect of the model was to explain six percent of the variance not explained in the 1966 model.

The model constructed using 1972 data where possible also exhibits generally weak relationships between most variables. However, race again is shown to be a statistically significant variable. A highly significant statistical relationship was observed between race and significant other influence and a significant statistical relationship was observed between race and goal blockage. One additional relationship of statistical significance was also observed -- the relationship between goal blockage and goal deflection. Further, the relationship between main breadwinner's socioeconomic index score and goal deflection was a relatively strong one ($P<.08$)

Comparative analysis of the model used with data from three points in time reveals one finding of interest -- the explanatory power of the model seems to increase over time. Not only do most of the individual relationships gain in strength (although we admit that most of the gains are minimal), but more importantly, all of the relationships between exogenous variables and AOGD, with the exception of one, increase in strength. And even the one exception (birth order) shows an increase in strength when comparing 1966 to 1972. All of the relationships between endogenous variables and AOGD show increases in strenth.

As one would predict, knowing the individual increases, the total explained variance of the model also shows consistent increases over time. In fact, the 1972 model explains 12 percent of the variance. While 12 percent explained variance is still admittedly small, it is nonetheless a substantial increase over the one percent explained in 1966 and, at the least, another five percent greater than was explained in 1968. Thus, whereas the utility of including the additional variables in the main exploratory model might have seemed somewhat futile after analysis using 1966 data, this may not be the case after all.

DISCUSSION

We can conclude from the work done thus far on AOGD, including our own, that AOGD still remains a very elusive phenomenon. The purpose of the present study was to see if the explanatory power of extant path models could be made greater by the addition of variables not previously utilized. To that end, this study's initial assumptions were correct -- the power of previous models is expanded. Whereas Curry and Picou explained only 3 percent of the total variance, the model used in the present study succeeds in explaning 12 percent of the total variance (in 1972), even though the present model did not use one of the variables in the Curry-Picou model.

However the findings of the present study really give us little reason to crow. Our orginal intent was to add to the body of literature on AOGD by including previously excluded variables in seeking an explanation of AOGD. This we have done, albeit with a minimum of success. Our main finding becomes more a matter of what we don't know rather than what we do know (at least this is true in a rather negative perspective). That is, we still cannot adequately explain the dynamics operative in the determination of AOGD, although much improvement has been made in understanding AOGD's most crucial constituent parts -- aspirations and expectations.

To date, the preponderance of work on the study of AOGD is of an empirical nature. Our knowledge of the literature on status attainment recalls only one paper (Kuvlesky, 1970) which discusses the theoretical basis of the concept, and which gives more than passing mention to its place within the larger sociological perspective. Because of the relative dearth of theoretical work, it is our impression that the rather broad question "To what end do we study AOGD?" may be sorely in need of an answer. At present, the fact that Kuvlesky, Cosby, Curry and Picou and others have given some empirical attention to AOGD has been enough to make of it a reified, researchable phenomenon. However, unless certain questions are raised about AOGD, unless some attempts are made to theorize about it, and unless some attempts are made to perhaps more adequately conceptualize AOGD, and in the process give it meaning relative to the sociological frame of reference, then the empirical work done on AOGD may result in little real sociological contribution.

As is theory meaningless without empirical work, so too is empirical work meaningless without theory. In the present study we have tried to further the empirical work on AOGD so that it is made a more understandable phenomenon. Since our efforts contribute to past efforts which find it difficult to explain the dynamics of AOGD, it may be that the next logical step for researchers interested in AOGD is one of giving more concern to its theoretical basis and importance. Our understanding of AOGD suggests to us that it is related to realism in the status attainment process, and further research from this perspective may yield fruitful results. Curry (1972) has begun research on AOGD relating it to the broader perspective of "anticipatory success." Perhaps as other researchers seek explanation and understanding of AOGD, its real utility will become more apparent and its importance in the research process will become more easily estimable.

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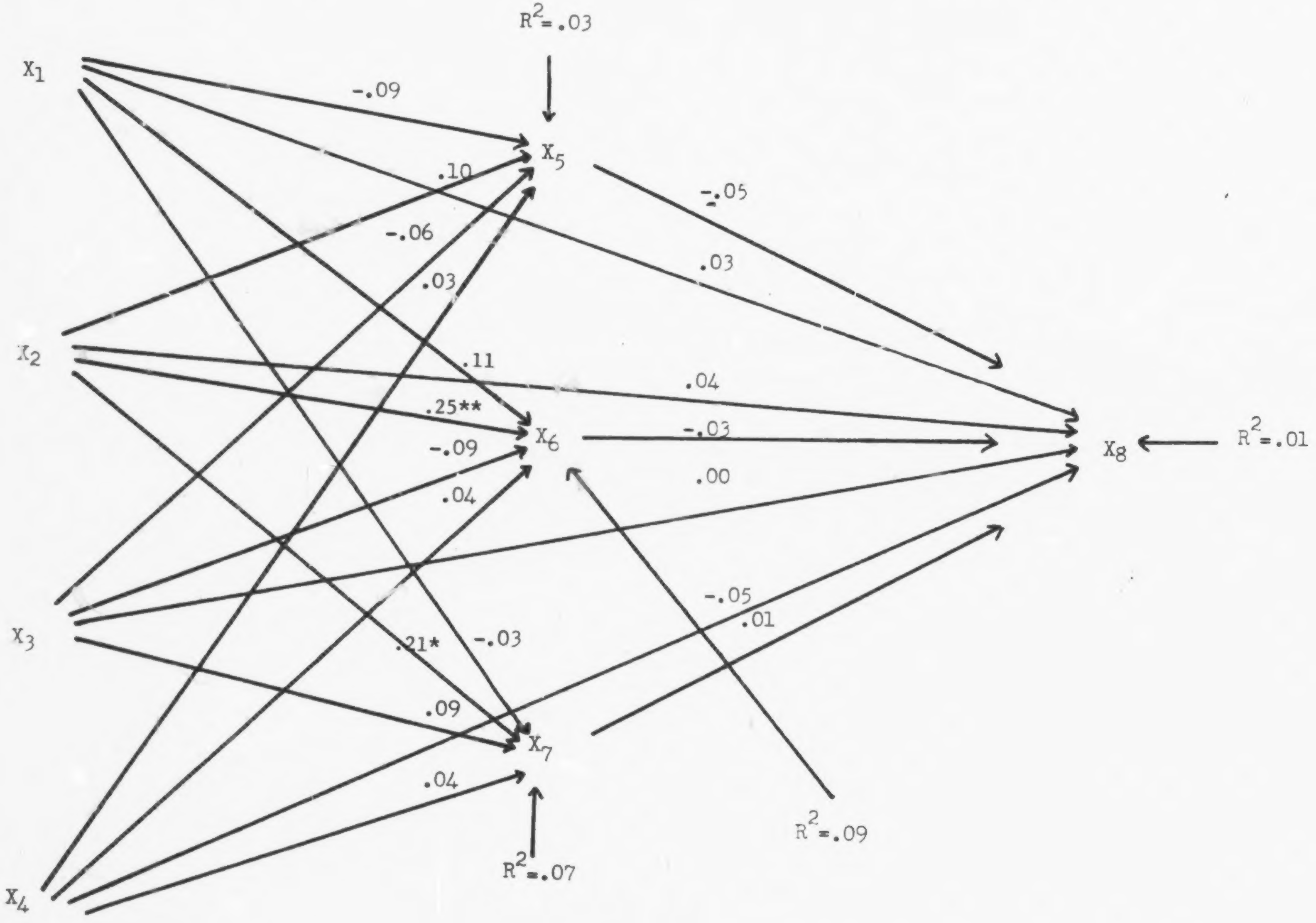
APPENDIX

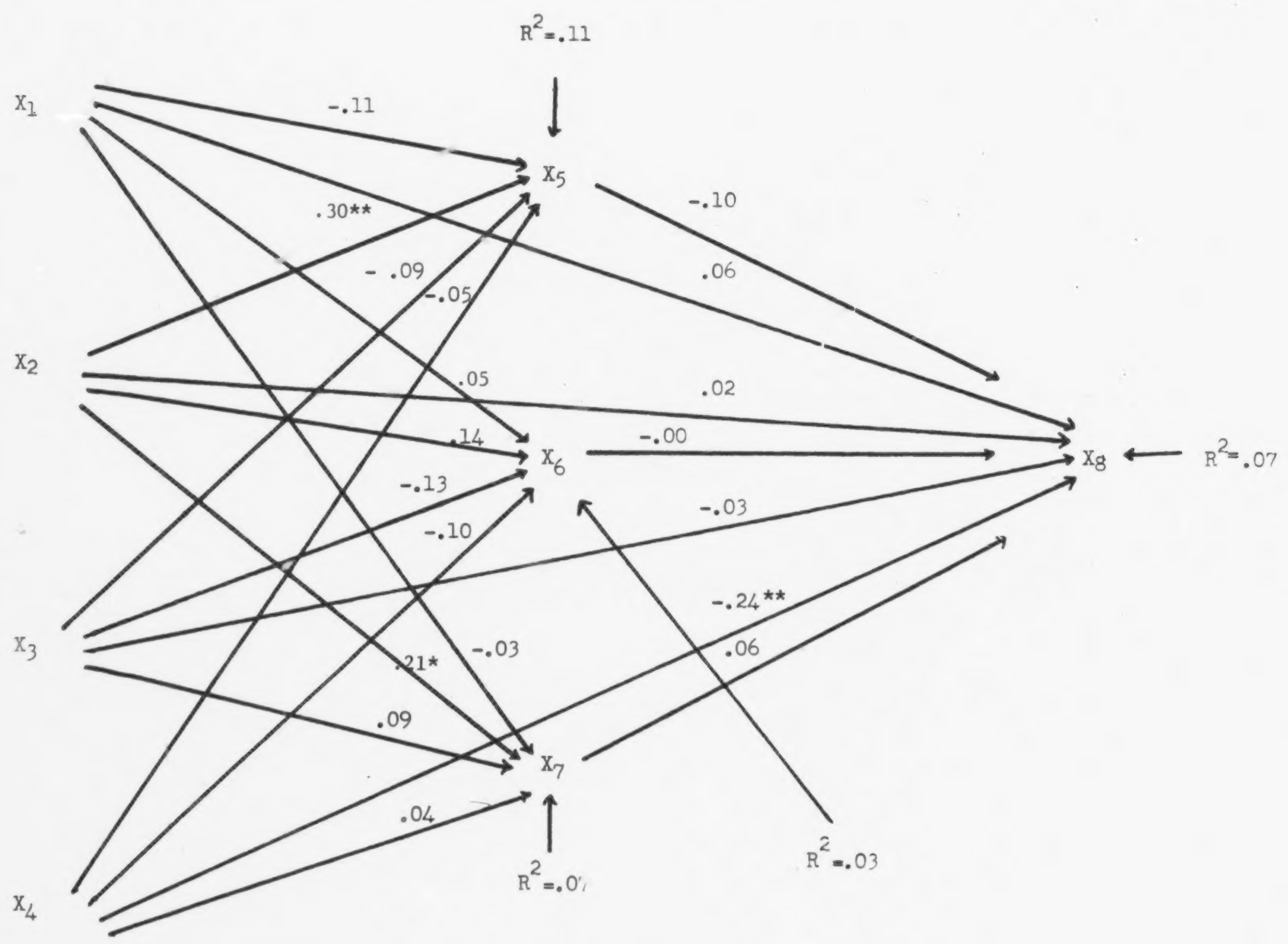
THE MODIFIED OCCUPATIONAL GOAL DEFLECTION MODEL (1966)


R^2=.03
X_1
-.09
X_5
.10
-.05
-.06
.03
.03
X_2
.11
.04
.25**
X_6
-.03
-.09
X_8
R^2=.01
.00
.04
-.05
.01
X_3
.21*
-.03
.09
X_7
.04
R^2=.09
R^2=.07
X_4

* Significant at .05 level

** Significant at .01 level

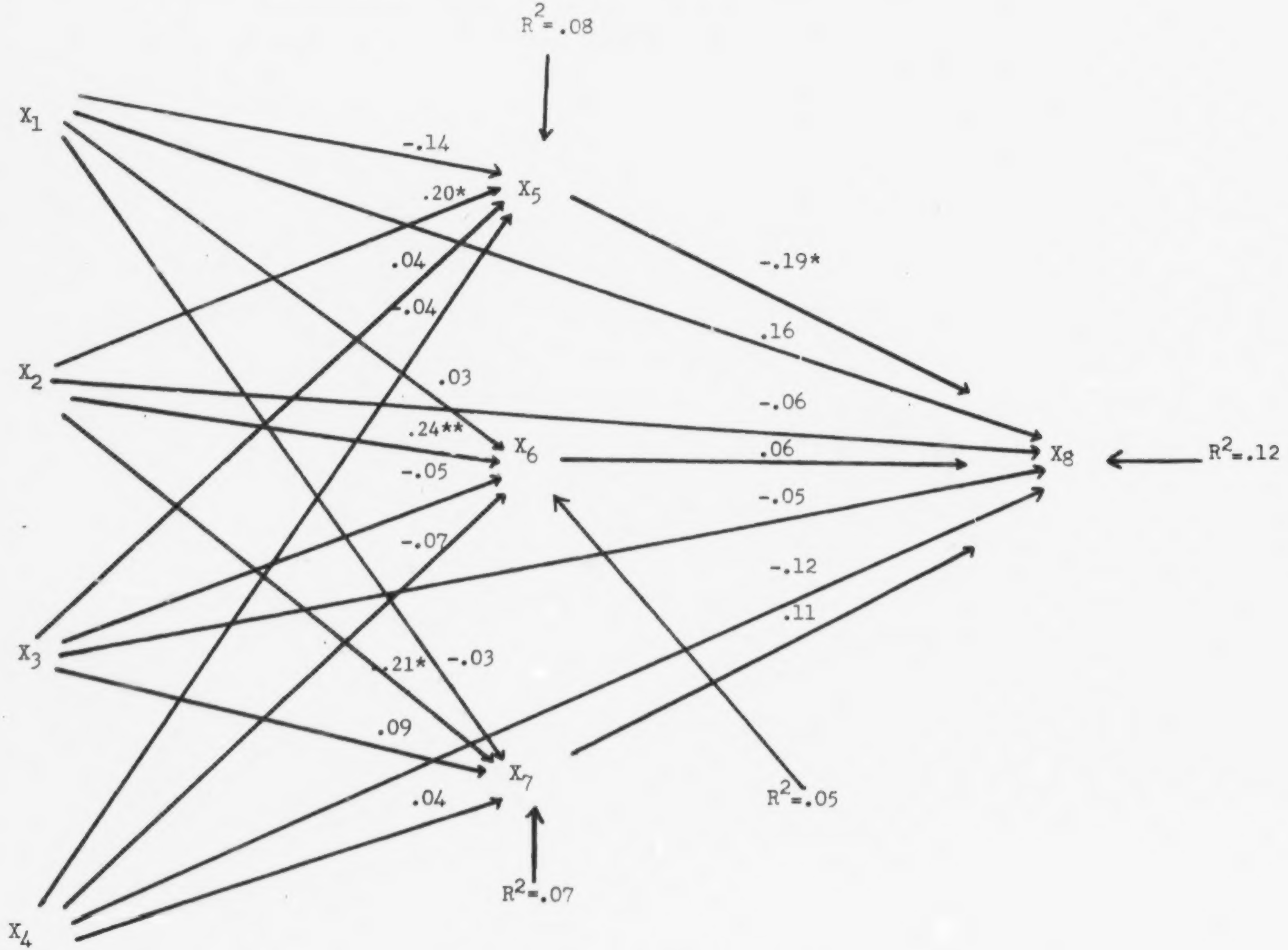
THE MODIFED OCCUPATIONAL GOAL DEFLECTION MODEL (1968)


R²=.11
X1
X2
X3
X4
X5
X6
X7
X8
R²=.07
R²=.07
R²=.03
-.11
.30**
- .09
-.05
.05
.14
-.13
-.10
.21*
-.03
.09
.04
-.10
.06
.02
-.00
-.03
-.24**
.06

* Significant at .05 level

** Significant at .01 level

THE MODIFIED OCCUPATIONAL GOAL DEFLECTION MODEL (1972)



R²=.08
X1
X2
X3
X4
X5
X6
X7
X8
R²=.12
R²=.05
R²=.07
-.14
.20*
.04
-.04
.03
.24**
-.05
-.07
.21*
-.03
.09
.04
-.19*
.16
-.06
.06
-.05
-.12
.11

* Significant at .05 level

** Significant at .01 level

Table I. Means and Standard Deviations

Variable	Mean	Standard Deviation
Breadwinner's Occupation	25.09	21.10
Self-Image (1966)	32.90	4.58
Goal Blockage (1966)	17.25	4.78
Goal Blockage (1968)	15.87	3.96
Goal Blockage (1972)	15.00	4.03
Significant Other (1966)	12.69	3.74
Significant Other (1968)	14.46	6.09
Significant Other (1972)	12.47	3.55
Aspiration (1966)	50.34	24.95
Expectation (1966)	43.34	25.32
Aspiration (1968)	57.24	26.19
Expectation (1968)	48.62	26.95
Aspiration (1972)	53.29	25.39
Expectation (1972)	42.66	24.15
Goal Deflection (1966)	-7.03	21.91
Goal Deflection (1968)	-9.13	22.33
Goal Deflection (1972)	-10.81	23.23

TABLE II. CORRELATION MATRIX OF EXOGENOUS VARIABLES

	X_1	X_2	X_3	X_4
X_1	1.000	-0.341^{**}	-0.179^{*}	-0.059
X_2		1.000	0.256^{**}	0.261^{**}
X_3			1.000	-0.065
X_4				1.000

X_1 = Breadwinner's Occupation

X_2 = Race

X_3 = Family Structure

X_4 = Birth Order

*Significant at .05 level

**Significant at .01 level

TABLE III
Correlation
Matrix

	Breadwinners Occupation	Race	Family Structure	Birth Order	Self Image (1966)	Goal Blockage (1966)	Goal Blockage (1968)	Goal Blockage (1972)	Significant Other (1966)	Significant Other (1968)	Significant Other (1972)	Goal Deflection (1966)	Goal Deflection (1968)	Goal Deflection (1972)
Breadwinner's Occupation	1.000	-.341**	-.179*	-.059	-.117	-.119	-.203*	-.215**	-.183	.035	-.035	.032	.088	.219**
Race	-	1.000	.256**	.261**	.249**	.125	.307**	.247**	.272**	.059	.201*	.006	-.083	-.163
Family Structure	-	-	1.000	-.065	.149	-.016	.016	.113	-.010	-.097	.007	.010	-.007	-.085
Birth Order	-	-	-	1.000	.089	.067	.041	.023	.117	-.055	.000	-.043	-.230**	-.138
Self Image (1966)	-	-	-	-	1.000	-.117	-.050	.132	.153	.093	.179*	.013	.040	.046
Goal Blockage (1966)	-	-	-	-	-	1.000	.194*	.238**	.106	.028	-.009	-.054	-.111	-.185*
Goal Blockage (1968)	-	-	-	-	-	-	1.000	.312**	.159	.066	-.033	-.042	-.123	-.084
Goal Blockage (1972)	-	-	-	-	-	-	-	1.000	.243**	.135	.069	-.027	.016	-.225**
Significant Other (1966)	-	-	-	-	-	-	-	-	1.000	.150	.246**	-.034	.010	-.131
Significant Other (1968)	-	-	-	-	-	-	-	-	-	1.000	.252**	.076	.015	.001
Significant Other (1972)	-	-	-	-	-	-	-	-	-	-	1.000	.045	-.019	.044
Goal Deflection (1966)	-	-	-	-	-	-	-	-	-	-	-	1.000	.059	-.068
Goal Deflection (1968)	-	-	-	-	-	-	-	-	-	-	-	-	1.000	.156
Goal Deflection (1972)	-	-	-	-	-	-	-	-	-	-	-	-	-	1.000

*Significant at .05 level
**Significant at .01 level

TABLE IV

Path Coefficients	Self Image (1966)	Goal Blockage (1966)	Goal Blockage (1968)	Goal Blockage (1972)	Significant Other (1966)	Significant Other (1968)	Significant Other (1972)	Goal Deflection (1966)	Goal Deflection (1968)	Goal Deflection (1972)
Breadwinner's Occupation	-.03	-.09	-.12	-.14	-.11	.05	.03	.03	.06	.16
Race	.21*	.10	.30**	.20*	.25**	.14	.24**	.04	.02	-.06
Family Structure	.09	-.06	-.09	.04	-.09	-.13	-.05	.00	-.03	-.05
Birth Order	.04	.03	-.05	-.04	-.04	-.10	-.07	-.05	-.24**	-.12
Self Image (1966)	-	-	-	-	-	-	-	.01	.06	.11
Goal Blockage (1966)	-	-	-	-	-	-	-	-.05	-	-
Goal Blockage (1968)	-	-	-	-	-	-	-	-	-.10	-
Goal Blockage (1972)	-	-	-	-	-	-	-	-	-	.19*
Significant Other (1966)	-	-	-	-	-	-	-	-.03	-	-
Significant Other (1968)	-	-	-	-	-	-	-	-	-.00	-
Significant Other (1972)	-	-	-	-	-	-	-	-	-	.06

*Significant at .05 level
**Significant at .01 level

BIRTHS TO YOUNG TEENAGERS: GEORGIA, 1970.

Clara L. Johnson
Research Associate

In spite of the current focus on the need for population control, together with the realization that there is a significant relationship between teenage parenthood (legitimate and illegitimate) and poverty, social concern with adolescent pregnancies and births continues to be directed mainly to moral and economic issues related to illegitimacy. As such, attention is especially focused on births to nonwhite girls. Such a perception of adolescent pregnancies and births prevents the acquisition of insight necessary for placing the problem in its proper perspective.

Social concern with adolescent births, especially as these concerns are inspired by population and poverty related issues, should include the wed as well as the unwed, the white as well as the nonwhite teenagers. An often overlooked fact is the high percentage of births contributed by teenagers to the total population problem. Both nationally and in Georgia, approximately one out of every four births is to a teenage mother, with a disproportionate percentage born to teenage mothers being legitimate at birth. In the State of Georgia* in 1969, there was a recorded total of 10,181 illegitimate births; 5337 or 52 percent were births to teenage mothers. In the same year, there was a total of 20,825 births to teenage mothers (19 and under).[1] For 1970, the trend was virtually unchanged. These data reveal a notable point which is generally not readily apparent--legitimate births to Georgia's teenagers account for approximately three-fourths of all teenage births. In relation to population concerns, then, there can be little doubt that the incidence of adolescent births, legitimate as well as illegitimate, is a factor which must be reckoned with.

This work supported in part by Research Grant #10-P-56015/4 from the Social and Rehabilitation Service of the Department of Health, Education and Welfare, Washington, D.C.

*In Georgia, the dichotomy for classifying births (legitimate-illegitimate) is deceptive. The child is legitimate if a man signs the birth certificate and admits to being the father, regardless of whether he marries the mother.

[1] Biostatistics Service, Georgia Department of Public Health, "Unwanted Births in Georgia; 1969." Prepared by Maternal Health Service. Also see the Departments report of total resident births, 1969, 1970.

Similarly, where poverty is the focus of concern, the incidence of adolescent births must also be considered. The high incidence of illegitimacy among the low socioeconomic groups, especially nonwhites, has been well documented (Frazier, 1932; Kihss, 1970). A special study of mothers of legitimate births (from a national sample of all births for 1964-66) indicated a concentration of married teenage mothers at a low socioeconomic level. Women who were 15-19 years old accounted for 33.3 percent of all births but 69.1 percent of those who had not completed high school at the time of the birth. This age category also accounted for 62.4 percent of the women from families with incomes under $3,000. This combined data suggest that approximately two-thirds of these married teenage mothers came from a low socioeconomic background (Kovar).

In addition to the fact that teenager mothers are generally located at a low-income level, the odds are stacked against their moving upward in the socioeconomic structure. It has been demonstrated that level of education is directly related to conditions of poverty. Similarly, it is common knowledge that young mothers are often denied the privilege of returning to school. But even if policies allow these girls to continue and/or resume their educational program, there remain many obstacles to their active pursuit of continued education. Early child-rearing undoubtedly decreases the amount of time, money, and physical and psychic energy the teenager, especially from a low-income background, might normally be able to invest in educational endeavors.

This report presents data in order to characterize counties in Georgia with respect to births to young teenagers. While much of the data is presented by race of mother, the ultimate underlying purpose is to illuminate the incidence of total births without specific regard for race and marital status of mother.* This is not to imply that there is never the need to focus on the phenomenon of adolescent births by race and/or marital status. Rather, it is felt that until the problem is observed in its total perspective, separate counties as well as the State, will not perceive its total impact, especially in relation to the needs for health and social services.

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*While the introductory remarks to this report are relevant to teenagers in general, for the most part, basic analyses in the report are limited to girls in the age bracket, 15-17. The data indicate a negligible proportion of births to girls under 15 by county. On the other hand, 18 and 19 year old girls contribute a sizeable percentage of births to the total population. Births to 19 year olds have been excluded simply due to lack of data. Data for 18 year olds were available; however, with the exception of population concerns, it is generally felt that the younger teenagers constitute the basis for major concerns, especially in relation to physical and psychological development, to school dropout, and to health problems for mother and infant. (see Johnson, "Adoloscent Pregnancy: Intervention into the Poverty Cycle").

Population data, i.e., county size, percent of population Black, and teen population, are based on the 1970 U.S. Census report. Data on births to teenage mothers are from materials supplied by the Biostatistics Service of The Georgia Department of Public Health, 1970. The reports in Georgia classify race as white and nonwhite. There is no way from these data to determine the exact contribution of Blacks to the birth data. Census data, however, indicate that the population of nonwhites other than Blacks in Georgia counties constitutes a negligible percentage of the total population. Thus, it is felt that the usage of the nonwhite classification synonymously with Black does not violate the efficacy of the report.

Table 1, which served as the basis for this report, shows a comparison by race of births to young teenagers as a percent of the specified population for all Georgia counties, 1970. The percentage indicates the number of births occurring per 100 live births for each age-specific category. It is readily apparent that there is a large difference by race in the proportion of teen births, with Whites having a much lower proportion. In terms of population concerns and probable social service needs, it may be necessary to note numerical contributions as well. While there is a marked difference by race in proportion of births, the numbers contributed to the total are similar -- 4177 White, 4332 Black (Table 2). Also included in Table 1, are data on Blacks as a percentage of total population, and a classification of counties by size.

For the total State (Table 2), 4.5 percent or 4-½ out of every 100 15-17 year old white population gave birth; 10.2 percent or slightly more than 10 out of every 100 black 15-17 year old girls delivered live births. Total births to 15-17 year old girls--Black and White--represented 6.3 percent of the specified population, i.e., slightly more than 6 out of every 100. Among white 15 year old girls, 1.4 percent gave birth; 4.2 percent of the 16 year olds; and 8.2 percent of the 17 year olds. Among Blacks, the percentages were 5.7, 10.9, and 14.2 for ages 15, 16, and 17 respectively. The combined total indicates that for the State, 2.8 percent of all 15 year olds gave births to live infants; 6.3 percent of the 16 year olds, and 10.1 percent of the 17 year old girls. There were 115 live births to white girls, age 11-14 and 424 such births to black girls. There were 3,513 and 3,542 live births to white and black girls respectively.

In addition to differences in percentage by race, a perusal of the data in Table 1 suggests differences by counties, i.e., are there differences based on county size?* Are there differences based on racial composition? Data in Table 3 persent a rank of counties with respect to births as a percent of total teen population. A cursory observation of these data does not appear to yield a specific trend in the relationship between county size and percent births. The mean proportions for the various sized counties were computed from which scores of differences between proportions were subsequently computed (Table 4). There was no significant differences between proportions of births to teenagers by county size. The large differences between whites and blacks naturally remain.

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*Size of counties is based on the following categories rather than on raw population data. Operational definition of county size, Size 1, less than 10,000 population; 2, 10,000--24,999; 3, 25,000--49,999; 4, 50,000--99,999; 5, 100,000--249,999; the two largest counties were viewed separately and designated as sizes 6 and 7.

Observation of the data in Table 5 initially suggests a possible relationship between births to teenagers and the racial composition of counties. Zero-order correlations for the relationship were computed for Blacks and Whites separately. A negative correlation was obtained for both White and Black, -0.214 and -0.269, respectively. While the tabular rank of counties with respect to teen births as a percent of total teen population--ages 15-17--is based on the total 159 counties, computations of the correlations were based on an N of 141 rather than the total number of counties. Counties with a total black or white teen population (15-17) under 25, counties with no Blacks and/or no black teenage girls in the specified age bracket, and the one county with the exceptionally large black population were excluded.

The obtained correlation indicate that for both black and white teenagers, there was a tendency for percentage births to decrease as the percentage of Blacks in the population increased. The correlations, -0.214 and -0.269, are significant at the .05 and .01 levels of confidence, respectively. However, it is difficult at this point, to even attempt an educated guess as to what this relationship implies. The following general hypotheses are offered for future study: (1) ethnic (racial), family, and peer group factors may combine to form differing cultural milieus which produce teenagers of distinctly different value orientations, and (2) ethnic and community factors may combine to produce differing community response to community organization and problems.

In summary, existing evidence appears to indicate that social concerns with the adolescent pregnancy phenomenon, especially as these concerns are inspired by population and poverty related issues, should include the wed as well as the unwed teenager. There ia a higher incidence of legitimate births than illegitimate. In Georgia, one out of every four births is to a teenage mother with approximately three out of every four babies born to teenage mothers being legitimate at birth. In addition, there is evidence which suggests that a large percent of married and unwed teenagers are from a low socioeconomic background. And the odds are against these young mothers advancing in the socioeconomic structure.

The data presented in this report have relevance for individual counties as well as for the State. By focusing on total births (legitimate/illegitimate, black/white) it is hoped that a new perspective of the adolescent pregnancy and birth phenomenon will ensue to give impetus to both county and State action.

Births to adolescent girls 17 and under numbered 9,048 in Georgia in 1970. Of the 9,048, 539 births were to teenagers under age 15. With 18 year old teenagers included, the total increased to 16,103. Teens (15-17 years) delivering live births represented 6.3 percent of the total population of girls in that age bracket. This means that slightly more than six of these girls in a 100 delivered live births in Georgia in 1970.

Counties were compared on the relationship between adolescent births as a percent of total teen population (15-17 years) and county size and percent of population Black. Results indicated no relationship between adolescent births and county size. On the other hand, a significant negative relationship was obtained for the relationship between adolescent births and percent of population Black.

Dealing with resident live births only, we can safely assume that the totals do not represent total teen conceptions, e.g., abortions, still births, births occurring outside the State, etc. Assuming further that most teen births (legitimate and illegitimate) are unwanted at the time of conception, it would appear that the ideal time for preventive action is before conception occurs. It may be assumed, therefore, that significant change in the incidence of conceptions and adolescent births may result from access to and usage of effective contraceptions. Effective contraception, therefore, must be made available to teenagers regardless of marital status.

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RESIDENTIAL PROJECTIONS AND PLACE OF RESIDENCE OF SELECTED LOUISIANA RURAL YOUTH*

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Abstract

The purpose of this paper is to analyze the place of residence projections and attainments of selected Louisiana rural youth and to ascertain the nature of racial and sexual differences. More specifically, the objective is to replicate selected residential projections in a study of Texas rural youth and to extend the analysis to subsequent place of residence attainments. Data for this analysis were obtained from a panel of senior boys and girls in twenty Louisiana rural high schools in 1968 who were followed up personally or by mail in 1972. Statistically significant chi-square differences at the .01 level by race and sex were found for residential aspirations and expectations. These are due primarily to substantially greater proportions of blacks desiring and expecting to live in large cities. Boys were more likely to desire and expect farm residence. Comparisons for strength of aspirations, certainty of expectations, and residential attainments were not statistically significant, except for female racial differences in certainty. Black females were the most certain of their expectations while white females were the least certain. In general, these findings replicate those of the Texas study.

Migration is a social mechanism for adjusting the geographical distribution of a population. It occurs differentially according to conditions of the areas of origin and destination as well as to certain social characteristics of the migrant. These selective differentials of migrants include age, sex, race, education, and employment (Bogue, 1959: 504; Lee, 1966: 56-57; Suval, 1972: 6, 35-39).

Youth migration from rural to urban areas is a well-known social phenomenon that has been an interest of rural sociologists in the United States for several decades. Although many interrelated factors

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factors influence this migration pattern of rural youth, four major research perspectives that have developed are as follows: social norms and personal aspirations, demographic and ecological factors, social and economic conditions, and family and community factors (Bowles, 1965: 274).

As aspirational approach concerning projections of rural youth for their future place of residence was introduced almost a decade ago. More recently, a conceptual scheme developed for occupational projections has been employed in research on educational and residential projections of rural youth in Texas (Ohlendorf and Kuvlesky, 1968; Kuvlesky and Pelham, 1970).

The purpose of this paper is to analyze the place of residence projections and attainments of selected Louisiana rural youth and to ascertain the nature of racial and sexual differences. More specifically, the objective is to replicate certain residential projections in the Texas study and to extend the analysis to subsequent place of residence attainments.

Conceptual Framework

The conceptual framework utilized in this research distinguishes between two types of status projections--aspirations and expectations (Kuvlesky and Bealer, 1966). Aspiration is the desire for attainment of a status while expectation is the anticipation of attaining the status, whether or not it is desired.

Both aspirations and expectations are subdivided analytically into two elements--the object of the orientation (i.e., the aspiration or expectation) and the strength of orientation toward the object. Strength of orientation refers to the strength of aspiration and the certainty of expectation.

Review of Past Research

Kuvlesky and Pelham (1970) have pointed out that little of the research on migration intentions or plans of youth is directly relevant for the status projection conceptual framework because the research is concerned primarily with one's intention to remain in or leave the present community of residence rather than an orientation to the broader range of potential alternatives for future places of residence. Their extensive literature review yielded only three previous studies that focused directly on residential status projections. All of these were concerned with ascertaining residential aspirations.

In all three of the previous studies, more girls than boys wanted to live in cities. The proportion of girls was two-thirds compared to one-half of the boys in Kentucky study of 451 rural high school seniors (Schwarzweller, 1960). In a Michigan study of 545 high school seniors from four all-rural counties, the proportions were one-third for girls and one-fourth for boys (Cowhig et al., 1960). More females also desired urban residence in a Florida study of 171 black and 240 white high school seniors from three low-income rural counties (Youmans, et al., 1965). Blacks were more likely to prefer urban residence than whites and an exceptionally large proportion of the boys (almost one-half) wanted to live in the country.

In their study of residential projections, Kuvlesky and Pelham (1970) found that much larger proportions of black youth aspired to live in large cities while more white youth aspired to live in small cities or in the country. Few of any race-sex grouping except white boys (22 percent) wanted to live on farms . A majority of all the groupings were weak with respect to strength of aspirations with no statistically significant differences between any race-sex groupings.

The Kuvlesky-Pelham findings for expectations were similar to those for aspirations except that more black males than females expected urban residence. With the exception of black females, their data show a slight but consistent trend for all rate-sex groupings to expect urban residence to a greater extent than it was desired. This was especially pronounced for white males because smaller proportions expected to live on farms or in the country. Regarding certainty of expectations, approximately one-half of each race-sex grouping was certain of their residential expectation. The racial differences in all the findings persisted when SES was controlled.

Procedure

Data Source and Collection

Data for this analysis were obtained from a panel of seniors in 20 Louisiana rural high schools in 1968 who were followed-up personally or by mail in 1972.

In selecting the sample, the state was divided into four geographical areas. Schools were selected from the rural parishes within each area to obtain racial proportions of students corresponding roughly with those for the entire state.

Initial data were collected in the spring of 1968 in group interviews. Seniors attending school on the day of the interviews were included in the sample. No attempt was made to contact any student who was absent. This procedure yielded 544 questionnaires.

Follow-up data were obtained in the summer of 1972 primarily by means of personal interviews. Mail or telephone contact was used when personal interviews could not be conducted because of location outside the state. Questionnaires with complete data for 1968 and 1972 were obtained from a total of 351 respondents (or 64 percent of those in the 1968 sample).

Variables

Residential aspiration is the kind of place where one most desires to live for the rest of his life. It was measured with a forced-choice question offering these alternatives: large city, medium city, small city, town or village, country but not on a farm, and farm.

Strength of residential aspiration represents the relative intensity of desire for one's residential aspiration. The measure was a question that forced students to rank the importance of their residential aspiration relative to six other status aspirations--occupation, income, education, family, material possessions, and leisure. The possible range of scores was from 1-7 and they were grouped as follows: strong (1-3), intermediate (4), and weak (5-7).

Residential expectation is the type of place where one really expects to live most of his life; it was measured with a question similar to the one for aspiration except that desire was changed to expect.

Certainty of residential expectation represents how sure one is that he will actually live in the place he expects. A Likert-type scale was used to measure five degrees of certainty--very certain, certain, not very certain, uncertain, and very uncertain. The very certain and certain categories were combined as certain and the remaining three were combined as uncertain.

Residential attainment is the type of place where one presently resides. It was measured with a forced-choice question offering these alternatives: very large city, small city, town or village, country but not a farm, and farm.

Data Analysis

The sample was subdivided by race and sex so that four separate analyses were conducted for each variable. Assessments of differences and relationships were made of each race-sex grouping for each variable. The chi-square test for two independent samples (Siegel, 1956: 104-111) was used to measure the differences between race-sex groupings while the coefficient of contingency (Siegel, 1956: 196-202) was used to measure the extent of the relationship. The .01 level or one percent probability was the criterion used to determine statistical significance of the observed relationships.

Results

Residential Aspirations

Statistically significant differences in residential aspirations were noted for each race-sex grouping (Table I). These were due primarily to substantially greater proportions of blacks desiring to live in large cities and to considerable variations in those desiring to live on farms. This varied from one-fourth of the white males to none of the black females. Smaller differences included males being less likely to desire living in medium cities, black males not desiring to live in small cities, and less black females wanting to live in the open country. In addition to the statistically significant chi-square differences for each race-sex grouping, substantial coefficients of contingency (0.32 to 0.42) indicated rather strong race-sex relationships with residential aspirations.

Table 1. Residential aspirations of selected Louisiana rural youth in 1968 by race and sex (percentages).

	White		Black	
Type of Place	Male	Female	Male	Female
Large city	4	7	25	33
Medium city	13	26	16	27
Small city	12	12	0	12
Town/village	12	15	11	16
Open country	34	31	32	12
Farm	25	9	16	0
Total	100	100	100	100
N	110	120	44	74
No information				3

Grouping	Chi-square	d.f.	P at .01	C
Race				
WM - BM	19.39	5	S	0.33
WF - BF	32.01	5	S	0.38
Sex				
WM - WF	55.64	5	S	0.32
BM - BF	25.05	5	S	0.42

Table 2. Strength of residential aspirations in 1968 of selected Louisiana rural youth by race and sex (percentages).

	White		Black	
Strength	Male	Female	Male	Female
Strong	29	33	26	23
Intermediate	25	24	33	38
Weak	46	43	41	39
Total	100	100	100	100
N	110	120	39	74
No information			5	3

Grouping	Chi-square	d.f.	P at .01	C
Race				
WM - BM	1.32	2	NS	0.09
WF - BF	4.54	2	NS	0.15
Sex				
WM - WF	0.34	2	NS	0.04
BM - BF	0.24	2	NS	0.05

No statistically significant results were found regarding strength of residential aspirations (Table 2). However, it is apparent that the racial differences were greater than the sexual differences. This appears to be due to more whites having stronger residential aspirations while more blacks had intermediate strength levels. These differences were most pronounced between the white and black females.

Residential Expectations

The findings for residential expectations closely parallel those for aspirations with statistically significant differences for each race-sex grouping (Table 3). The greatest differences were that substantially greater proportions of blacks expected to live in large cities and the differences for farm residence was also apparent, although less pronounced than for aspirations. Much larger proportions of white males expected to live in the open country but considerably smaller proportions of black females expected to do so. White females were most likely to expect medium city residence while white males were least likely to do so. No black males expected to live in small cities, as was also the case for aspirations. Again, the substantial coefficients of contingency (0.31 to 0.39) indicated moderately strong race-sex relationships with residential expectations.

Table 3. Residential expectations of selected Louisiana rural youth in 1968 by race and sex (percentages).

Type of Place	White		Black	
	Male	Female	Male	Female
Large city	10	7	32	31
Medium city	15	31	22	26
Small city	13	16	0	19
Town/village	13	19	10	13
Open country	31	22	22	11
Farm	18	5	14	0
Total	100	100	100	100
N	109	118	41	74
No information	1	2	3	3

Grouping	Chi-square	d.f.	P at .01	C
Race				
WM - BM	16.37	5	S	0.31
WF - BF	25.06	5	S	0.34
Sex				
WM - WF	19.61	5	S	0.31
BM - BF	21.26	5	S	0.39

Table 4. Certainty of residential expectations in 1968 of selected Louisiana rural youth by race and sex (percentages).

Certainty	White		Black	
	Male	Female	Male	Female
Certain	57	42	67	78
Uncertain	43	58	33	22
Total	100	100	100	100
N	109	119	43	74
No information	1	1	1	3

Grouping	Chi-square	d.f.	P at .01	C
Race				
WM - BM	1.43	1	NS	0.10
WF - BF	24.48	1	S	0.34
Sex				
WM - WF	5.03	1	NS	0.15
BM - BF	1.71	1	NS	0.12

In general, the youth in this study were certain about their residential expectations (Table 4). With the exception of white females, over one-half of each race-sex grouping was certain they would live in the place they expected. For white females, this situation was reversed and it accounts for the only statistically significant result--the differences between black and white females. This also produced a substantial coefficient of contingency (0.34). Since less than over-half of the white female and only slightly more than one-half of the white males were certain of their expectations, black youth were more certain of their expected place of residence than were white youth.

Residential Attainments

None of the race-sex comparisons produced statistically significant results for residential attainments (Table 5). However, some of the comparisons--especially the racial ones--are interesting. Much larger proportions of the blacks (more than one-third) lived in very large cities compared to only one-fifth of the whites. No black males and only three percent of the black females lived on farms compared to sixteen percent of the white males and eight percent of the white females. The other notable difference was that only eight percent of the black females lived in small cities compared to at least twice of this percentage for all the other groupings. The racial comparisons yielded moderate contingency coefficients (0.24) while the sexual ones were weak (0.15 and 0.17).

Table 5. Residential attainments of selected Louisiana rural youth in 1972 by race and sex (percentages).

	White		Black	
Type of Place	Male	Female	Male	Female
Very large city	22	19	34	35
Small city	16	21	16	8
Town/village	26	28	25	30
Open country	20	24	25	24
Farm	16	8	0	3
Total	100	100	100	100
N	109	120	41	76
No information	1		3	1

Grouping	Chi-square	d.f.	P at .01	C
Race				
WM - BM	8.81	4	NS	0.24
WF - BF	11.84	4	NS	0.24
Sex				
WM - WF	5.57	4	NS	0.15
BM - BF	3.44	4	NS	0.17

Discussion

This research adds to the limited body of knowledge concerning place of residence projections and attainments in two ways. First, it replicates a similar study of residential projections of rural high school sophomores in Texas. Second, it is the first known study to analyze subsequent residential attainments.

The findings of this study provide further support for the generalizations from the limited past studies that rural female and black youth have a greater propensity to desire and expect urban residence. For white female aspirations, this finding has been reported in all four previous studies during the past decade. Further reservations are in order for expectations because only one other study of residential expectations is known to have been conducted. The racial differences for the variables also need to be qualified due to the small number of available studies. In addition, it should be pointed out that the racial and sexual differences in residential aspirations and expectations in this study are consistent across all groupings whereas the sexual differences for blacks were not statistically significant in the Texas study. The findings in this study support those of other studies in which residential aspirations have been found to be weak. However, large proportions of all youth, particularly blacks, were certain of their expectations in this study, as well as in the only other one in which certainty was studied.

Since this is the only known study of residential attainments, the basis for generalization is restricted severely. However, some comments and observations about the findings are in order. The absence of any statistically significant racial and sexual differences in attainments is somewhat surprising, especially since such strong differences existed for aspirations and expectations four years earlier. Subsequent analyses should determine whether these differences persist in aspirations and expectations after four years. Further analysis is also needed to determine the nature of the relationships between residential projections (aspirations and expectations) and place of residence attainments. Such analyses are planned with the data used in this study.

Finally, it should be noted that residential aspirations, expectations, and attainments are relevant for the current policy emphasis on rural development. The desires and plans of rural youth are a key element for the success of this program and the findings of this study suggest that more rural youth want to live in rural areas than are able to do so currently. In this regard, it would also be interesting to compare the place of residence projections and attainments of urban youth to determine the extent to which they aspire and expect to reside in rural areas.

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DISABILITY AND FAMILY STRESS: CONCEPTUAL SPECIFICATION AND RESEARCH POSSIBILITIES*

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INTRODUCTION

A lot has been written about a rather vague, heterogeneous category of families often labeled "disadvantaged" or "low-income". We generally have in mind the economically poor when we use such labels (The Concept of Poverty, Gordon, 1965). Economic disadvantagement or "poverty", however, is only one way in which family units can be disadvantaged. There are forms of disability suffered by families that are not limited to the poverty class--although they are usually hypothesized to be more prevalent among the economically disadvantaged families than others. Social scientists need to begin making more precise distinctions between types of family disability if we are to clearly understand how the well-being of a family unit relates to other family attributes and potentials of its membership. The purpose of this paper is to make a start in this direction by looking conceptually at a form of family disadvantagement--membership disability--that has received little attention from researchers in the past.

Our first objective in this paper is to develop a conceptual framework capable of translating membership disability of biological or personality origins into an attribute of the family as a social unit. Secondly, we intend to make explicit connections between individual based disability and stress points within the family system and in its external social relations (Bredemeier and Stephenson, 1962:47-59). Suggestions will be offered relative to directions for future research suggested by this framework.

WHAT THE PAST RESEARCH SHOWS

Little exists in the accumulated research of sociology relating to membership disability. This should not be too surprising since the field of medical and health studies has only begun to build steam in the last few years. It still represents a relatively minor problem area in terms of the attention we give it. Much of the existing accumulated literature is made up of relatively recent, scattered efforts showing a lack of any kind of clear conceptual or theoretical continuity. The review of literature we have done--and we think it is relatively comprehensive--demonstrates two different conceptual perspectives toward family disability--viewing it as an individual attribute and as a specialized role, "the sick role" (Hrubec, 1959:271; Petroni, 1969; Geersten and Gray, 1970; Phillips, 1965; and Petroni, 1969).

With the exception of a study carried out by these authors (Byrd, Taft, Kuvlesky, 1972) no reports of research could be located which viewed disability as an attribute of the whole family conceived of as a whole social group.

The literature on social causes of disability is also very scant. Only two articles were found which, in a small part, relate directly to this issue. Hrubec (1959:271) found, "The presence of a health problem in one of the family members is accompanied by the presence of health problems in the other family members." Surprisingly, Petroni (1969) found that SES was not related to the frequency of reported illnesses and that family size was inversely related to reported illnesses for the lower class but not for the middle class.

No firm conclusions can be drawn from the studies on perceived rights to the sick role as no evidence exists to establish the relation between the perception of the role and those who actually become disabled. It can be tentatively concluded, however, that family factors may be as important in determining disability in individuals as individual factors. Causes of individual and family disability may be different--future research should shed some light on this.

What about stress caused by disability? Again, few studies exist which shed light upon this question. Rosenstock and Kutner (1967) write that in a crisis a family generally experiences a change of role patterns, expectations, and a general disorganization which is followed by recovery and reorganization, or alienation and dissolution. More to the point, Hrubec (1959) found that both families with disabled members and the disabled people themselves had more social problems than others. Nagi and Clark (1964) discovered that among couples under 25, at the onset of a disability of one of the married partners were more likely to separate or divorce as a result of the stress caused by disability. Those who stayed together had higher occupational, income, and educational levels, more children under 10, and more owned their own houses. It appears that the resolution of stress caused by disability has a positive influence on family performance. Ludwig and Collette (1969) studied dependent (upon wife) and nondependent disabled husbands. They found that dependent husbands spent more time with their wives and less time with friends and relatives and were less likely to be involved in the decision-making process. Gibson and Ludwig (1968) studied social security disability applicants and found fewer disabled Blacks married. Deutsch and Goldston (1960) found that disabled husband-fathers seemed to have had the greatest impact of change or disorganization to deal with in their family roles. They concluded that few families can meet this kind of stress.

This modest number of studies--scattered in place, time, and focus--has done little more than document the fact that internal and external family stresses can be produced by disability. Some of this research does establish an empirical link between disability of an organic and personality nature with stress at the social system level, the family unit.

As an aside, taking a bare-faced, empirical-descriptive point of view for a moment, not much exists even on the distribution of individual disability in a gross sense among different social types of family units. An earlier paper by these authors has demonstrated that disability viewed as a family attribute occurs much more frequently than when it is viewed as an individual attribute (Byrd, Taft, Kuvlesky, 1972). Almost one-fourth of all families in a sample of metropolitan and nonmetropolitan blacks were found to be disabled in this study.

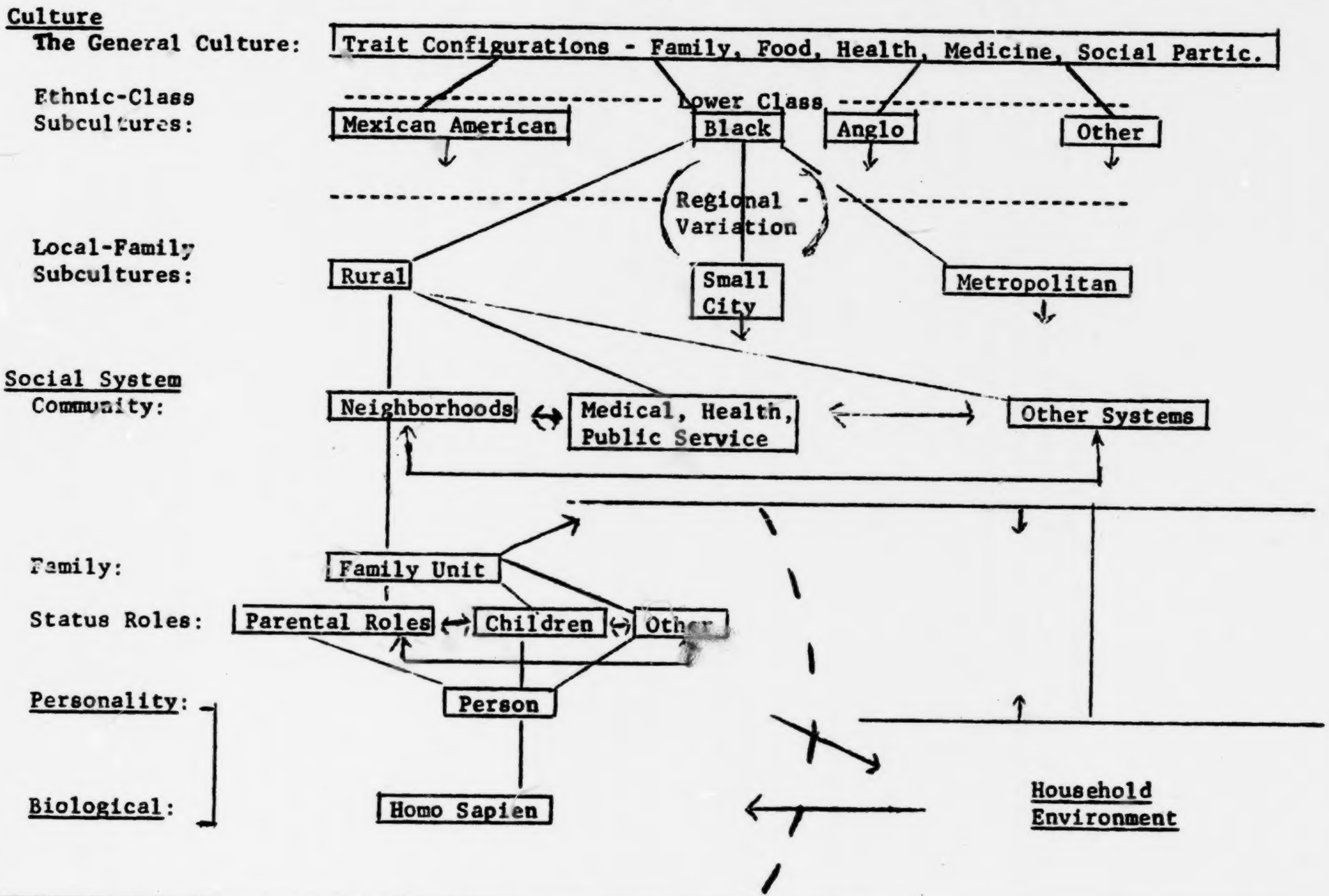
Perhaps one good explanation for the lack of more research in this problem area and the conceptually barren and eclectic nature of that which does exist has been the lack of a systematic, broad, guiding frame of reference. The remainder of the paper will be given to an attempt to make a start at formulating such an inclusive conceptual scheme based on an equilibrium-stress model of interpenetrating levels of behavior organization (Parsons, 1951).

TOWARD A GENERAL FRAMEWORK: THE CONTEXT OF FAMILY BEHAVIOR

One attempt to marshal ideas relative to building a broad general framework for the study of the family as a whole unit operating within the context of a psychological interior environment and external social environment exists in a recent book of essays by Gerald Handel (1967) entitled, The Psychosocial Interior of the Family. Even here, in a collection of 23 separate pieces, only two articles relate to the development of a broad, contextual framework for viewing family disability at several system levels: articles by Hell and Handel (10-24) and by Handel (517-550). While both are useful, neither goes beyond a simple suggestion of the system levels of operation that need to be considered in a structural review of relevant research. Neither accomplishes the broad framework for analysis promised in the title of the book.

A broad and inclusive frame of reference that can handle the diversity of cultural and social system variations existing in our complex society, and one which also can handle the problem of interpenetrating levels of human reality is needed for a comprehensive, indepth analysis of family disability. It is our judgment that Talcott Parsons' (1951) schema of system levels for action provides the basis for such a framework. Parsons views human reality as structured in four separate but interpenetrating levels of organization: cultural, social, psychological, and biological (Black, 1960:29-38). His assertion of interpenetration holds that each of these levels impacts on each of the others, but in varying degrees. If this is a valid assertion—and we think it is—the causes of family disability might evolve from any of these system levels. Likewise, disability of members at the biological and personality levels must impact on the family, and then through it to the larger social and cultural universe of which it is a part. In Figure 1 we attempt to show how these ideas of Parsons

Figure 1: **System Levels of Human Organization: Ethnic Variation in Family Modes of Adjustment.**


Culture
The General Culture:
Trait Configurations - Family, Food, Health, Medicine, Social Partic.
Ethnic-Class Subcultures:
Lower Class
Mexican American
Black
Anglo
Other
Regional - Variation
Local-Family Subcultures:
Rural
Small City
Metropolitan
Social System
Community:
Neighborhoods
Medical, Health, Public Service
Other Systems
Family:
Family Unit
Status Roles:
Parental Roles
Children
Other
Personality:
Person
Biological:
Homo Sapien
Household Environment

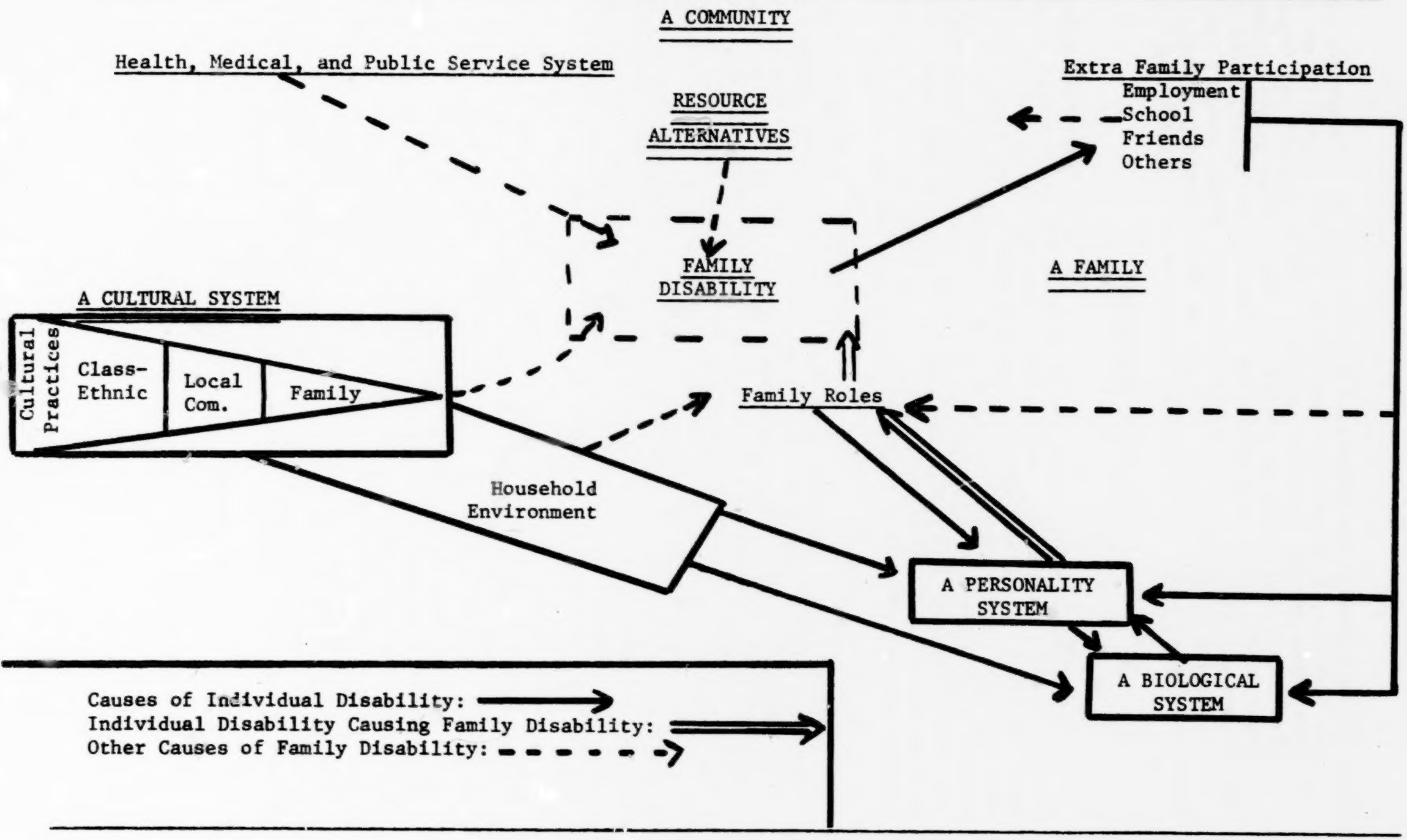
can be used to provide a broad, comprehensive framework to analyze family units in reciprocal interaction with elements in their interior and exterior environment. We have introduced several complicating dimensions of variability (i.e. class, ethnicity, and place of residence) to demonstrate the potential for comparative analysis inherent in the schema.

It should be obvious to the reader that one clear advantage to the use of this framework, or some similarly broad one, is that it does facilitate interdisciplinary thinking about research problems and point to areas of potential interdisciplinary investigation. Of course, this may also be viewed as a limitation. If one were to try and carry out all potential dimensions of investigation at one time, you would need a large and diverse team of researchers. Fortunately, it is not necessary to do this--even the lone, single-discipline researcher can be aided in gaining direction from such a broad perspective.

It goes without saying, that this schema needs to be tested in research to assess its utility for analysis. One way of doing this is to attempt to use it to organize and integrate the past research on family disability alluded to before. It is not our intention to do this here, but it does point to an immediate research need for the future.

Figure 1 demonstrates quite clearly the potential complexity of dealing adequately in research of even relatively "simple" social issues such as disability. The lines in the diagram indicate the reciprocal interpenetrations among different levels of behavioral organization and among units at the same levels that should have meaning for family disability. Those appearing as arrows indicate sources of prime causal factors related to the incidence of family disability. While this model needs extensive elaboration and specification--not to mention testing in research--even in this rough shape it can provide a broad orienting framework for more specific efforts aimed at conceptual specification of internal family elements and processes. Figure 2 demonstrates this shift in cognitive focus toward a narrower spectrum of conceptual operations centering on the family as a unit and family disability as the focal attribute of that unit.

Figure 2. A Conceptual Model of Family Stress Introduced by Member Disability: Possible Sources and Impacts


A COMMUNITY
Health, Medical, and Public Service System
RESOURCE ALTERNATIVES
Extra Family Participation
Employment
School
Friends
Others
FAMILY DISABILITY
A FAMILY
A CULTURAL SYSTEM
Cultural Practices
Class-Ethnic
Local Com.
Family
Family Roles
Household Environment
A PERSONALITY SYSTEM
A BIOLOGICAL SYSTEM
Causes of Individual Disability:
Individual Disability Causing Family Disability:
Other Causes of Family Disability:

FAMILY DISABILITY AND STRESS: BASIC CONCEPTIONS

Overview of Conceptual Needs

Any abnormality of personality or biological structure or process that produces stress for the individual in his adjustment to himself or his external environment can be labeled an individual disability. It is problematic whether or not disability of this kind will influence operations of his family roles, reactions of other family members toward him, or the operations of the family viewed as a whole unit. In Figure 2 we have depicted some of the causal flows of disability at the level of individual action (solid arrows) and then the lines of potential stress causing disability for the family as a unit (broken arrows), including the source which is our dominant concern here--the individual (double solid arrows). This provides a pictorial view or map of the conceptual distinctions to follow.

When individual disability of a member of a family introduces role stress to the extent that the performances of the member's internal family role relations (role-set) are influenced negatively, a state of membership disability is considered to exist. In turn, when the state of membership disability produces problems requiring adjustment of family structures, family stress exists. As an aside, it should be pointed out that family stress can evolve from other sources, Figure 2. When the family stress is such that it impedes the maintenance of integration in the family system and/or negatively influences the unit's capability for adaptation to the total environment--including the social--and this condition becomes patterned, these patterns are labeled family disabilities.

While the sequence of assertions given above does include a description of the meanings of the basic conceptions we are concerned with here--individual disability, membership disability, family stress, and family disability--each requires some additional specification, elaboration, and demonstration of utility for analysis. It should be obvious to the reader that we remain consistent with our broad Parsonian framework in our conceptions here--they presume a system normally striving for equilibrium and are defined in functional terms (Bredemeier and Stephenson, 1962: Chpt. 2).

Individual Disability

The disability of individual members of the group, when considered as individual human beings and defined in biological or psychological terms, is here termed "individual disability". Because the biological and psychological attributes of individuals are basic resources or, in Loomis's (1960) terminology, facilities for operation of the family system, the quality of these should be expected to have some impact on the social system level of operations. Of course, this impact will vary depending on at least several considerations at both the individual and social system level: nature and degree of individual disability, positional location of the disabled person, and level of economic resources available.

It must be emphasized that individual disabilities need not translate directly into membership disability; at least, it is problematic whether they will or not. Individuals may suffer biological or psychological weaknesses, faults, abnormalities, or illnesses that create serious problems of adjustment for them as individuals without this condition necessarily having an important impact on their family role performances and requirements. Admittedly this is more a possibility than a probability from our point-of-view. Still, it provides sufficient reason to conceptually distinguish between the disability of the individual and the consequences of this for role performance and for the family as a social unit.

We have asserted earlier that type and degree of individual disability are two factors that will influence the nature of its impact on the system. The logical, general types of individual disability in this regard are outlined in Figure 3.

Figure 3. General Types of Individual Disability, Based on Personality and Biological Malattributes

	Nondisabled	Disabled		
System Level		Type I	Type II	Type III
Biological	Normal	Abnormal	Abnormal	Normal
Psychological	Normal	Abnormal	Normal	Abnormal

Membership Disability

We have no interest in considering further individual disability that has minimal or no impact on the family system. From the system point of view, the individual member is not disabled relative to its requirements under such circumstances. However, if individual disability impedes a family member's role performance it has social significance for the family and becomes labeled *membership disability*. Obviously, we are using a functional criterion to distinguish individual and membership disabilities, Figure 4.

Figure 4. Conceptual Distinction Between Individual and Membership Disability Among Family Members.

Type of Disability	Biological or Psychological Malattributes		
	Personal Stress	Role Stress	Social Impact
Individual	yes	no	none
Membership	yes	yes	probable

Obviously sub-types of membership disability should be specified, at least, in terms of type and degree of individual malattributes (see Figure 3). Also, it seems reasonable to think that a qualitative typology of kinds of disability might have explanatory utility at the social system level. However, we leave these problems to be developed through future efforts. Specification of such subtypes and testing their research utility should provide an immediate, priority research problem.

Membership disability, as discussed above, is grounded in individual disability and probably will influence processes of family integration or adaptation. Let us examine a few hypothetical examples of this complex intersystem interpenetration in terms of our earlier typology of individual disability (Figure 3). The person categorized as "Abnormal, Type I" is both psychologically and physically abnormal. Imagine a person inflicted with both ulcers and paranoia. He may have become thus in one of several ways. He could have started out with a psychological problem and allowed that to affect him physically. Or, he could have been a paranoiac which affected him physically in the form of an ulcer. On the other hand, this person may have been physically maladjusted and, in turn, became a paranoiac. Another possibility is that an individual experienced a single catastrophic event which left him both psychologically and physically injured. Finally, the person may have become psychologically and physically maladjusted as a result of entirely independent causes. Functioning--malfunctioning may be seen as a continuum. The major concern here however, is the degree to which role behavior of an actor in a social system is affected by personality and biological system malattributes, regardless of the degree of malfunction (Gross, et al., 1958: Chpt. 4; Deasy, 1969: Chpt. 6). Presume the individual described above is a father in a small family: his ulcer, regardless of how bad it is, will not likely impact on his family role-set to the extent that his paranoia will, regardless of how mild it is. His probable patterned tendency to be suspect of motives of behavior of other family members toward him will undoubtedly cause stress, role conflict, in the family relations. The degree of stress may vary by a number of considerations: in this case, how well the other family members understand his illness and its behavioral consequences.

Family Stress

As mentioned earlier, family stress is simply viewed as a state of disequilibrium or maladjustment of the family social system; for instance, conflict between marital partners over whether or not children should have a regular weekly allowance or not. Economically disadvantaged families, including ethnic minorities, can be expected to be less flexible in their ability to tolerate such stress than others. Affluence provides opportunity for more alternative adjustments to such situations than does poverty.

Family stress results from impediments to performance of family roles or functions that disrupt or have a high probability of disrupting family maintenance, cohesion, intraunit interactions, or external relations with other units. More specifically, the direct sources of stress may be in the individual's performance of internal roles, conflict between individuals in performance of roles, or extrasystem role linkage. Membership disability can impact on these considerations, and thereby produce stress in such a way that it has potential negative, influence for the family.

Types of family stress can be differentiated on the basis of the nature of the adjustment problem. Of course, a family in trouble can--and probably does more often than not--experience several different types of stress at one time. A simple typology could be based on general social and economic problems as shown in Figure 5. Obviously, each of these general types could be subdivided into significant subtypes through the addition of more specific considerations.

Figure 5. General Types of Family Stress: Social and Economic Problems.

Internal	Low Cohesion	Poor Management
External	Interunit Conflict, Social Isolation	Inadequate Resources or Facilities

It should be made clear that what we are defining as family stress could evolve from any system level of human reality, including the social and cultural; however, for our purposes here it is only necessary for us to consider those evolving as a consequence of problems inherent in the biological and psychic statuses of individuals who are members of the family: in other words, from membership disability in terms of our prior definitions. Still, a research problem of a more general nature should be mentioned at this point: the need to develop good, generally valid indicators and measures of the functionally different types of stress mentioned in Figure 4 and others (i.e. value conflicts, negative social orientations of actors, lack of family identification, poor boundary maintenance, and etc.).

Family Disability

Membership disability is transformed into family disability through the production of family stress. Family disability that results in this manner constitutes properties of the system or group and can be viewed from several different perspectives or "dimensions of family disability": magnitude of collective disability, positional distribution of disability, and specialized roles (i.e. "the sick role").

Collective Disability

Collective disability simply refers to the amount of aggregate disability existing among the total number of individuals identified within the boundaries of a particular family unit (i.e., the collectivity or group). From a social system perspective this is the crudest way to view the disability of the unit: it does not really relate to properties of the social system *per se*. Still, even in this respect, family disability has been little investigated (Byrd, Taft, and Kuvlesky, 1972). In an earlier research analysis we represented this with an index developed to indicate the magnitude of total membership disability (Byrd, Taft, Kuvlesky, 1972). This index is described in the APPENDIX of this paper.

The Sick Role

The concept of special roles evolving within the social unit to house a disabled member has been researched to a limited extent (Gordon, 1966: Chpt. 2). We still know little about the nature of the definition of these roles, how they are instigated or terminated, and how they influence the structures and operations of the larger family unit. Of course, the conception of a "legitimate" sick role is one way the family unit may attempt to adjust to membership disability with minimum stress. Whether or not this works as an adaptive mechanism under varying conditions is a live question deserving much future research.

One problem of particular interest to social scientists is how duration of existence of the sick role impacts on the ill member's family role and the family. There would appear to be at least three possible distinctly different variations in this respect: "temporary sick-role", "enduring sick-role", and "permanent sick-role." It would seem logical to expect that at least two variables would influence variation in patterned definitions of all or some of these sick-roles—SES and size of family. This suggests a line of research that should be attractive to some sociologists.

Positional Distribution

Perhaps, the dimension of family disability having the most research potential for sociologists is positional distribution of membership disability. As reported earlier, at least one study has shown that where disability occurs in the family, relative to functional status-roles, it does make a difference in family disruptions (Deutsch and Goldston, 1960). An interesting question to explore evolves from Goldston's earlier finding that disability in the husband-father role seems to be more disruptive than disability housed in other family positions. Is this because the adult males were usually the main breadwinners in the families he studied? Would the same be found in cases where the husband was unemployed?

Family disability has different meanings for the family, dependent upon who is disabled--the father, the mother, or the child. The impact varies with differential location of the disabled member and conditional factors of family life (i.e. economic status, geographical isolation, and other similar factors).

As one explores this concept further, several pertinent considerations related to internal family processes enter the picture. These include degrees of commonality and/or difference in attitudes toward the disabled family member; perception of personality change; family decision-making; and the presence or absence of social solidarity.

The disabled father is most likely to be totally dependent upon the mother, relinquishing his traditional role as decision-maker; particularly if he cannot work. He may tend to isolate himself from persons other than the family group. The sick role is most likely assumed only when he is seriously disabled: the "sick role" is not "masculine". Permanently disabled fathers may frequently have sons with personality problems which are related to the absence of a strong father figure in the family setting.

The disabled mother probably assumes the sick role only when the level of cohesiveness in the family provides a nurturing environment. When a high level of marital integration exists, when children are responsive to her needs, and when medical attention is forthcoming, it is "safe" to assume the sick role. On the other hand, the mother who may, in reality, be disabled as an individual and need to assume the sick role, may resist doing so when a non-nurturant environment exists: the long-run dysfunctions of such behavior should be obvious. This presumes control of the situation by the mother. When the mother cannot control the situation, the father may assume both parental roles, insofar as possible--attempting to maintain the family unit with or without the assistance of the extended family and/or friends.

With regard to the disabled child, the mother is generally the decision-maker in day-to-day health matters. She decides whether or not the child stays home from school or should remain indoors and/or whether or not the child should be seen by a doctor. Decisions other than health, primarily economic in nature, appear to be the province of the father in families with fathers present. Of course, these two prime areas of decision making normally split by the marital pair overlap when medical attention is called for.

Though very little research is available, there is some evidence to indicate that when mothers tend to regard disabled children as dependent, increased adverse tensions occur among normal siblings (Barsch, 1968). Fathers may criticize the mother for neglecting the other children while being overindulgent toward the disabled child. Mothers accuse fathers of apathy. Both parents may reflect positive and negative changes. Marital friction is often suggested in the perceptual discrepencies of both fathers and mothers. Attitude change and the respective dual perceptions of these changes which exist in each parent present an area of significance for study.

Though differential location has its concomitant set of consequences in each instance, there is a probability that regular contact within the family setting will tend to diminish the severity of the disability in the eyes of the other family members. Living with the problem over a long period softens the perception and may bring about a higher level of acceptance than at the onset of the disability. The stress is dissipated as attitudes and social structures adapt to the change. In such cases, those that have adapted to the problem, the family may be even in better shape socially after the introduction of membership disability than it was before. Nagi and Clark (1964) have reported findings in support of this proposition.

Of course, positions in the family unit can be differentiated and examined in other ways also; for example, status-rank and social power. We know of no research that has explicitly investigated disability in terms of differential location of members along these structural dimensions of the unit!

Another related aspect of structural family disability that should be mentioned is the vacancy of a position in the family that is considered normatively a part of the total unit. This certainly would lead to either internal or external adjustment problems and could be caused by a progressive type of individual disability that results in death or institutionalization of the disabled member. Both the trauma experienced by other members as a result of the loss and the need to adjust to an additional burden of sharing required functions of the unfitted status-role will present threatening adjustment problems.

Whether or not differential distribution of membership disability makes any difference or not remains to be researched. We speculate that such differential distribution of disability in the social fabric of the family unit will have important consequences for the family and its members. Perhaps a better question is, what kinds of differences result in the family as a result of differential location of disability?

SUMMARY OVERVIEW

Our objectives in this paper were to develop a broad, systematic conceptual framework to facilitate studying psychological and biological based disabilities of individual family members as attributes of the family unit and to direct attention to potentially useful research on the causes and social consequences of family disability. A review of the relevant past research demonstrated an eclectic array of studies that were generally conceptually deficient and difficult to integrate because of varying explicit or implicit conceptual frames. Utilizing a multiple level system, equilibrium-stress model, a general contextual framework was developed which focused on forces impinging upon the family unit relative to disabilities evolving from malattributes of individual members.

Within this frame of reference an attempt was made to introduce conceptual specifications related to disability that would make it possible to move logically from research in disability at the biological and psychological levels to disability induced by these in the role-set of family actors and in the social structures of family units. Consequently, disability was differentiated conceptually to exist at varying levels of human organization and labeled differently at each level: individual disability, membership disability, and family disability. Each of these level-types of disability related to the family were defined, subtypes developed, and illustrations offered relative to potential research utility. Particular attention was given to delineating structural dimensions of disability at the family system level--collective disability, special roles, positional location, and several others. Attention was also given to demonstrating potential research problems they directed attention to.

Throughout the paper care was given to point out suggestions for future research evident in our developments. While we are certain we did not do a perfectly complete job in this respect, a large number of priority potential research thrusts were identified. A few of the more important of these are as follows:

(1) Systematic codification and synthesis of past research on family disability in terms of a comprehensive, coherent, conceptual scheme offering interdisciplinary potentials.

(2) Descriptive research relative to incidence of disability of all types in families of various types in order to develop a capability for generalizations relative to the incidence and distribution of each.

(3) Research oriented to specifying sub-types of each level-type of disability to facilitate causal analysis of its occurrence and its impacts on the social system of the family.

(4) Research aimed at testing relationships between environmental factors, including social structures outside the family, and frequency of occurrence of family disability. We have offered a number of specific suggestions in this regard.

(5) The impact of structural disability in the family system on other family structures and on members of the family collectivity. Again, we have offered a number of hypotheses that should prove fruitful for research.

In no respect do we consider this a definitive effort in meeting the need for comprehensive, highly specified, and empirically fruitful conceptual scheme relative to human disability and its impact on the family. This paper should be viewed as a first step to demonstrate the need and to offer an alternative path to filling the need. Obviously, much conceptual work still remains to be done and, hopefully, it will be done in conjunction with empirical research as we move forward from this point in time. We plan to continue refining our basic ideas described here as we test them in future research already on the drawing board. We would sincerely appreciate reactions of our colleagues to this effort.[1]

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[1] Send critiques, remarks, or suggestions to the first author, Dr. William P. Kuvlesky, Department of Agricultural Economics and Rural Sociology, Texas A&M University, College Station, Texas 77843.

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APPENDIX

A Measure of Collective Disability in the Family

Earl Taft has developed a measure of aggregate membership disability in connection with an earlier analysis of a metropolitan-nonmetropolitan comparison of disability among Black families in East Texas (Byrd, Taft, Kuvlesky, 1972). We have abstracted his description of the procedures used in developing this index below.

The stimulus question used in our study for disability was "Is anyone in this family sick all the time or disabled in anyway?" If the respondent said there was, she was asked to describe the seriousness of the disability along the following lines:

FOR EACH PRE-SCHOOLER ASK:
Which of the following best describes his (her) ability to play?
5. Not able to take part at all in ordinary play with other children.
4. Able to play with other children but limited in amount or kind of play.
2. Not limited in any of the preceding ways.

FOR EACH CHILD IN SCHOOL ASK:
Which of the following best describes his (her) ability in school and activities:
5. Not able to go to school at all.
4. Able to go to school but limited in certain types of schools or in school attendance.
3. Able to go to school but limited in other activities.
2. Not limited in any of the preceding ways.

FOR EACH OTHER FAMILY MEMBER ASK:
Which of the following best describes his (her) ability to work?
5. Not able to work (or keep house) at all.
4. Able to work (keep house) but limited in kind or amount of other activities.
2. Not limited in any of the preceding ways. (NC-90 Patterns of Family Living Questionnaire, 1970:3)

The responses were coded "1" if the person was not disabled and "2" through "5" for the various degrees of disability indicated above. With "1" being the lowest degree of disability (none) and "5" being the highest (unable to work, et cetera), the distinctions in the instrument were kept for all measures in this analysis.

The family disability index to be utilized in the primary analysis is a composite index weighted for family size and degree of disability and converted to [illegible] 99.0 scale. The family disability index was computed for each family by summing the recorded degrees of member disability for all members in each family and dividing by the number of members in the family. This figure was then multiplied by 25 to convert it to a scale of 0.0 to 99.0 in order to increase the spread of measured differences and making the index scores easier to interpret.

To demonstrate the potential utility of the scale one table from the earlier report is included in Table 1 for the reader to inspect (Byrd, Taft, Kuvlesky, 1972:Table 8).

Table 1. Degree of Collective Disability Among Texas Black Families by Education of Homemaker and Place of Residence.

Educational Levels of Homemaker	Nonmetro* (N=257)		Metro** (N=281)		Differences: NM as compared to M
	-------Family Disability---- ----------Index Means-------				
Less than 8 grades	9.1	-	8.1	=	1.0
8 Grades	6.7	-	8.6	=	-1.9
9-11 Grades	3.2	-	5.6	=	-2.4
12 Grades	4.0	-	1.3	=	2.7
College or Graduate Study	7.0	-	4.6	=	5.4
All Levels	5.2		4.6		.6
*β_1 = -0.63	t=2.86		df=256		P<.005
**β_1 = -1.15	t=4.47		df=280		P<.0005

*Regression on NM with X=education levels (run on raw data with 20 levels of education possible) and Y=family disability index. β_1=slope and t=effect of X on Y.

**Regression on M.

One can see from the data in Table 1 that collective disability varies dramatically by level of education for both types of place of residence and, in general, is particularly high in families having homemakers with eight grade education or less. Place of residence difference are generally less substantial and inconsistent.

Several apparent weaknesses or limitations of the disability measure and family disability index used here need to be considered. There is no objective criteria used to determine actual physical, mental or emotional problems but instead the homemaker's subjective evaluation of the member's ability to perform some function. The homemaker is probably the one who decides who is well enough to go out to play, go to school or work and probably exerts her influence and power to keep members home when she believes they are too ill, etc. An apparent weakness of the index is that a family with one member disabled out of four is given a higher score than a family with one member disabled out of seventeen. Because past research has demonstrated (Dow, 1965) that small families react more extremely than large families to disability in one child, we believe this trait of the index validly reflects reality and, therefore, is not a limitation. Obviously the limitations mentioned above should be considered in the development of instruments for future research.

RURAL-URBAN MIGRATION AND THE EXTENDED FAMILY SYSTEM*

H. Max Miller**

Introduction

Although evidence abounds of the increasing significance of secondary groups, mass culture and mass communication media, primary groups still persist and fulfill a major portion of mans' needs. In general terms, primary groups made a tremendous impact on the personality and character of the individual and of all groups, none has greater impact or is more important than the family. The assumption that the family is the cornerstone of society is still a valid one. However, it is apparently a crumbly cornerstone and a less than perfect method of meeting basic needs. Societal maladjustments, personal disorganization and other related social problems all attest to the fact that the family is not operating at its maximum level of effectiveness.[1]

During the past two decades much research and many specifications of urban social interaction, the function of kin, and patterns of mutual aid to offspring have appeared in relation to varying aspects of kinship in the Western World.[2] Generally what has resulted has been some rather ambiguous and contradictory conclusions and at best some very tentative findings regarding the function of kinship in urban settings. The purpose of this paper is to synthesize the revelant literature, to focus issues for purposes of research endeavor and finally to draw conclusions for the development of deductive hypotheses regarding the nature of kinship in urban settings.

Not all of the reasons for the failure of the family to function effectively are found within the family itself. One of the most profound changes of the twentieth century has been the trend toward urbanization. The proportion of the world's population that live in urban places increases daily and the influence of the "urban way of life" is pervasive and widesweeping. The demographic and social aspects of this trend have commanded great attention and produced numerous descriptions of urban existence, especially of the specific form and function of the family in a urban setting.[3]

Cities are agglomerations of people and activities where the major functions of the industrial society are carried on. As such they are the foci of economic and political functions and their influence and interrelationships with their outlying hinterlands exist without question. Movement of people from rural to urban place and from urban place to urban place in search of economic rewards or occupational opportunity is an accepted characteristic of urban life. Social contacts of urban dwellers are widely diffused and segmental and a viability of relationships is made possible by the profuse communication and transportation networks that exist. "Thus, economic motivation, specialization, segmentalization, and

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*Paper presented at the annual meetings of the Rural Sociology Section Association of Southern Agricultural Workers, Atlanta, Georgia, February, 1973

**Department of Sociology, The University of Georgia, Athens, Georgia social network scatter are generally recognized concomitants of urban residence."[4]

Conceptualization

In descriptive terms, the family in contemporary Western Society is depicted as a nuclear unit that has lost its larger kinship function as a consequence of urbanization and industrialization. Usually a number of functions for which the family is no longer primarily responsible is cited as evidence of this fact.[5] These functions include, the religious, economic, educational, protective and recreational. Accordingly then, the nuclear family has replaced the larger kinship unit and has assumed new functions. Primarily the new function(s) involves the socialization of children.[5]

Generally speaking, the kinship system has adapted to urban society. It can be assumed, on the basis of the existing literature, that urban kinship relations are bilineal in nature, provide primary relationships, mutual aid and other services for contemporary urban dwellers. For the most part, parent-adult-offspring relations are closest interactionally. Inherent in this body of findings is the implied notion that the adaptation of the family to urban society has involved alterations in activities engaged in with kin, residential segregation and shifts in expectations inherent in kinship relations.[6]

Regardless of these somewhat general descriptions, the study of kinship relations is one feature of urban existence that has been less frequently subjected to intensive analysis. Generalizations about the American family system and its adaptation to urban industrial society have usually been based upon studies of specific aspects of urban kinship. In essence, many studies have convincingly demonstrated that "being part of an urban society signifies neither uniformly great distance from ones kin nor does remoteness, when it does occur, necessarily signal isolation in terms of contact."[7]

The prime issue until this point involves the mass migration that has taken place in the United States. This trend has produced a family system that consists of scattered nuclear units that are spatially separated and cannnot perform basic functions as formerly carried out in extended kinship systems.[3] Rather obviously, substitute changes have been found and these consist of the increased use of telephones, mail and postal services, even financial aid. The point is that with respect to certain functions social space and physical space have to correspond to each other.

This reduction in the performance of functions by the family is well documented, vividly described and generalized upon. The question, is however, have we gone so far in the segregation of interaction patterns among nuclear family units that the obligation to perform certain functions has been left from our value system. So then, the essential question becomes one of whether in the post mass-migration system, after the extended family has regenerated itself in an urban setting, will its members be close in physical space and will some former functions be reinstituted. If the obligation to perfrom the functions has not disappeared, then obviously these functions will start-up again. If we are simply involved in a period of quiescence and if the functions are reinstituted to the family, the way in in which the family functions will possibly change. That is, the content of the roles extended family members play towards each other will change. The real question becomes not whether the content will change, but whether the function will change. A number of changes can be offered as evidence of change in the function of kinship systems. To name only a few, these include:

1. Child rearing assistance,
2. Borrowing and lending of money and material objects,
3. Borrowing of tools and household accessories,
4. The exchange of confidences, advice and emotional support,
5. Participation in mate selection and the regulation of courtship,

For example, a function such as the regulation of courtship and participation in mate selection has undergone drastic change from the way in which it was carried out in stable rural communities. Possibly we are in a period that still involves the invention of new patterns and more probably new patterns may emerge as a result of post mass migration stability of the extended family in urban settings. The point remains, however, if we keep the functions and change the form we will still have the extended family system in an urban setting. What makes it an extended family system is the functional interdependence of the parts.

There is nothing inherent in the urban situation or industrial society that precludes the extended family. What we have taken as the form or model has resulted from the consequence of migratory shifts in population. Many would point out that a money economy is inherent in urban-industrial social organization. While this may be the case, it can be pointed out that many economic institutions were evolved not in order to take functions formerly performed by the family, but because the population has been dislocated and certain family functions are difficult to perform under the circumstances. We might do well to pose the question as to why the extended family system has continued to perform in some urban settings such as Japan, and not in others. Possibly the size of the geographical base would be a factor, but this still does not constitute an explanation in and of itself.

Conclusions and Summary

It appears to this author that one of the more fruitful areas for further concern involves change and interrelations with other systems. This is essentially the question of how does kinship adapt to the urban setting. It is proposed that the large rural-urban migration that has recently taken place has produced only a temporary modification of kinship patterns. I would hypothesize that the extended family system in American society is in a period of temporary decline which has been produced by rural-urban migration and that once rural migrants have established themselves in cities over several generations the extended family system will more closely approximate the performance of its former function even though it may change in context.

At least two methods of study may be suggested. One method would involve the longitudinal study of a group of in-migrants to a given urban area who all come from the same specific area or locality. These in-migrants could be followed over a period of years to see if their characteristics change with regard to relations with kin groups. A more feasible design would possibly consist of subsamples of three distinct age categories; i.e., a sample of a population of young adults, a sample of a population of middle aged persons and finally a sample of a population of older adults. Individuals could then be classified on the basis of how long they, their parents, grandparents, or other secondary kin had lived in the same urban area. On the basis of this classification and with measures of frequency and quality of contact with kin relations, those who have lived longest in cities could be compared with those who have had short tenure in urban areas or with rural residents.

If our assumptions are valid and the extended family does regenerate itself in urban places, then those who have lived in an urban setting for the longest period of time will display characteristics of an extended family system. Those who have been there for only a generation or so will appear to be isolated nuclear families.

Footnotes

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4. Bert N. Adams, "Kinship In a Urban Setting," Markham Publishing Co. (Chicago, 1968), pp. 1-8.

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6. Adams, op. cit., pp. 8-9.

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PRISMATIC FAMILIES AS AN IDEAL TYPE: THE CASE STUDY OF SIX RURAL NONFARM FAMILIES IN NORTH CAROLINA

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Prismatic Family as an Ideal Type

The method of "constructive typology" which the work of Max Weber was the first to delineate and apply (Max Weber, 1949) has been richly developed and used by sociologists of the past and should not be disregarded by modern sociologists, particularly those concerned with the study of social change. Even though sociologists may disagree about the ways in which a constructed type should be derived and applied, it is clear that "The device has played an undeniable role in the growth of scientific knowledge despite the fact that it has been frequently misused, misinterpreted, or not even recognized by its users" (McKinney, 1950, pp. 235-240).

According to Carl Hempel (1952, pp. 65-86), a logical positivist, there are three main divisions of types that can be distinguished in the theories of methodology in social science: (a) classificatory types, (b) extreme types, and (c) ideal types.

In the first of these, types are constructed as classes. This approach is not accepted as typology by modern sociologists. They assert that no constructed type can be established by isolating a class; at most they call this the extracted, empirical type. The extreme types, also called the "pure" or "polar" types, Hempel designates as representing extreme places on a systematic gradation scale. The third division, "ideal" types, he sees as the result of isolating and exaggerating certain aspects of concrete empirical phenomena. Hempel separates the extreme and ideal types by including in the former those which possess specified criteria of relations to others in their appropriate gradation scales and which are used for generalization in classifying types; he leaves in the "ideal type" division those which do not possess these characteristics and functions.

As defined by Becker (1952), the "constructed" or "ideal" type is a "purposive," planned selection, abstraction, combination, and accentuation of a set of criteria that have empirical referents, and that serves as a basis for the comparison of empirical cases. The constructed type differs from ordinary concepts only in degree, not in kind. Like ordinary concepts, constructed types are made more precise through selection and limitation, plus the addition or extension of qualities which makes the construct to some extent different from the experienceable reality. Since the type more or less deviates from the reflection and correspondence of perceptual reality, exceptions to it will always be found to exist if the type has been accurately derived. The type is so devised that within its structure all the essential properties of a concrete structure (or course of action) are logically contained but not necessarily in the proportions or patterns of relationships of any empirical occurrence.

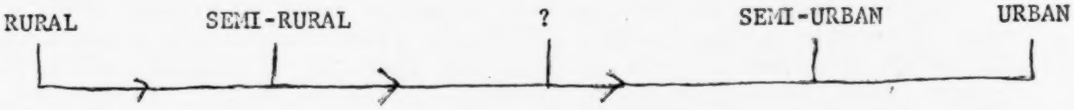
Sociologists also emphasize that the ideal type is a heuristic device, (Winch, 1947, pp. 68-75) by which the multiple and particular can be ordered according to common qualities and thereby acquires usefulness for precise statement and validation. Ideal types help us think systematically and are comprised of a structure of symbols and operating rules. If the type is well constructed, it can help understand and think about phenomena to which it is applied; if poorly constructed it can lead to misunderstanding. Hence the degree to which our study of the families in the changing rural areas can lead to confusion or clarity may depend upon our construction of the appropriate type.

We may start with the assumption that families in the changing rural areas typically involve a combination of traditional and modern values. This assumption is well supported by the various community studies in our review of the literature. This combination of traditional and urban values and attitudes can take place along several dimensions -- for example the Springdale of Vidich and Bensman (1960) may have different dimensions of this combination as compared to Martindale and Hanson's (1969) Benson. Two families in a changing rural urban fringe area may have different combinations of traditional and modern values, attitudes, and way of life. Farming is regarded as a family tradition in a familistic rural environment (Tarver, 1952, pp. 266-271). All members of the family engage in one family occupation and social contacts are personal, primary, and intimate. Public opinion serves as a control on the behavior and spatial isolation contributes to social solidarity and dependence upon the family. Social status is largely ascribed based on traditional values rather than upon innovations (Wilkening, 1954, pp. 29-37). Dramatic changes have occurred in the sphere of social relations. The intimate, primary and personal contacts which were dominant in the rural setting have been replaced by impersonal and secondary ones. The gainful employment in diverse occupations outside the home has been taken up by the family members as contrasted with farm work in which all family members participated. The behavior of the individual is increasingly controlled by formal and impersonal social structures and no longer so much by the opinion of the small community. The religious, recreational, and educational functions formerly performed by the rural family have been taken over by other social agencies. A large rural family unit has turned into a small conjugal family unit. The traditional family function of caring for its dependent elder members is being transferred more and more to public and private agencies.

From the foregoing discussion it is clear that the traditional and modern value systems are in complete contrast and conflict with each other. There are distinct rural (traditional) values as there are distinct urban (modern) values. But what about the families in the rural-urban fringe? Are these families distinct enough in their values and attitudes so that these can form a third family type which we refer to as the "prismatic family"? Martin (1957, pp. 173-183) is of the opinion that rural and urban family types merge into a new kind of family in the metropolitan fringe. Zimmerman (1947) thinks in terms of rural and semi-rural families as contrasted with urban families. Burgess and Locke (1945) consider a third type of family as one "which seeks to combine the values of both the old rural and modern urban situations."

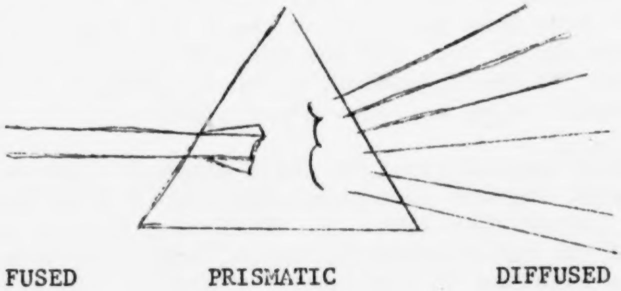
Whenever a structure performs a large number of functions, we may say it is functionally diffuse; when it performs specific functions, we may call it functionally specific. In view of this we can now posit two types of families. In the first (rural type of family) the functions are very specific, in the second (urban family type) very diffused. We may call the first model fused and the second diffused. The terminology is taken from physics and the analysis of light. Fused light is composed of all frequencies, as in white light; whereas the diffused light isolates the component frequencies, as in a spectrum. The rural family is fused because it functions as a unit. On the contrary, the urban family is diffused because it functions in a heterogenous world which demands multiple activities from it.

The process of transformation of the fused or specific rural family to the diffused or differentiated urban family does not happen suddenly. Temporally this process varies from society to society -- it may be slow in India as compared to the United States where the pace of change is rapid. On a scale of rural-urban families Zimmerman has pointed out the existence of a semi-rural type of family. Martin (1957), Jaco and Belknap (1953), Zorbaugh (1929) and others have pointed toward the emergence of a semi-urban family. The following diagram shows this.



If we take rural, semi-rural, semi-urban, and urban as the stages of transformation of rural family into an urban family, we are left without any answer for the middle stage families (shown by question mark sign in the diagram). We contend this type is the "prismatic family."

In using the original context from which our methaphor comes, let us imagine a prism through which fused light passed to emerge diffused upon a screen, as a rainbow spectrum. Can we imagine a situation within the prism where the diffusion process starts but remains incomplete? We can refer to such a stage as "prismatic."[1] The figure below explains the process.



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[1] The term "prismatic" has been taken from Riggs (1964) but our use of this term is entirely different from that of his.

The prismatic type helps us understand why types (rural and urban) devised to study both ends of a continuum are inadequate for the intermediate situation. The social sciences that study specialized structures are inadequate because, although differentiated structures arise in prismatic form, they scarcely function autonomously. One cannot, therefore comprehend any one of these structures without taking into account the related structures which continually and drastically modify its behavior.

The prismatic family type developed here is not a static entity. It constantly moves toward the urban type and adjusts and assimilates urban values gradually while leaving behind rural (traditional) values, mores, and norms. Such families are caught in a conflict situation which comes about through the opposition between rural (traditional, local) and urban (modern, nonlocal) values.

Methodology

Families may be studied not only from the point of view of their value orientations, demographic structure, place of residence, education, and social class but also in terms of the phase of the family life cycle through which they happen to be passing. While the former aspects are primarily viewed as structural, the latter viewpoint emphasizes the social interaction that takes place at the various stages of the family life.

The heads of the six families selected for the present case study were in the age group 30-39 at the time of the S-44 survey in 1961. Of these six families three are white and three are black. The structured interviewing method was used to gather comparable data on these six families in 1961 and 1966 under regional projects S-44 and S-61. These six families were interviewed in depth in 1972 in order to understand the dynamics of changes reflected in their responses to structured questions in the previous surveys and since. We chose all the families in our study from the age group of 30-39 at the time of the 1961 survey because this enabled us to study the dynamics of change in families at a somewhat similar age and stage in the life cycle.

In what follows an attempt will be made to offer interpretations to the data which have been gathered on these six families. The purpose of this interpretation is to: (1) see the changes that have taken place in these families, (2) the adjustment to these changes, (3) and the delineation of the "prismatic" types and characteristics.

In the next section first we shall attempt to present a table containing the major factors that have characterized the six families over a twelve year period (see Table 1). Following this we discuss briefly the concept of the rural-urban continuum, and based upon this concept, we delineate a typology of "prismatic" families. An attempt will also be made to identify the families which come close to the "prismatic type" and some hypotheses will be deduced using both manifest and latent types of data on these families.

Table 1. Changes in the Six Families.

Name of the Family	Anomia	Organizational Participation	Income	Informal Social Participation	Attitudes Towards Borrowing Money	Material Possession Items	Level of Living	Social Mobility	Residential Mobility	Change in Areas of Life Satisfaction	Motivations	Aspirations	Familism	Time Consciousness
The Williams Family (White)	Head High Homemaker High	No Change	Increased	No Change	Liberal	Increased	Increased	Upward	Moderate	Changed	High	High	Low	Moderate
The Ayscue Family (White)	Head High Homemaker High	No Change	Increased	No Change	Moderately Conservative	Increased	Increased	Upward	None	Slight Changes	High	High	Low	Moderate
The Roberts Family (White)	Head High Homemaker High	No Change	Increased	No Change	Liberal	Somewhat Increased	Increased	Somewhat Upward	None	None	High	High	High	Least
The Jones Family (Black)	Head High Homemaker High	No Change	Slightly Increased	No Change	Somewhat Liberal	Somewhat Increased	No Change	No Mobility	None	Changed	Low	Low	High	Least
The Connor Family (Black)	Head* Homemaker High	No Change	Decreased	**	Liberal	Decreased	Decreased	Downward Mobility	None	None	Very Low	Very Low	High	Least

Table 1 (continued)

Name of the Family	Anomia	Organizational Participation	Income	Informal Social Participation	Attitudes Towards Borrowing Money	Material Possession Items	Level of Living	Social Mobility	Residential Mobility	Change in Areas of Life Satisfaction	Motivations	Aspirations	Familism	Time Consciousness
The Thompson Family (Black)	Head High Homemaker High	No Change	No Change	No Change	Conservative	No Change	No Change	Not Mobile	None	None	Very Low	Very Low	High	Least

*The head of the family died in January, 1972.
**Due to the death and fire in the house, we did not think it proper to use questions about their interest.

Six Families

Table 1 shows some major characteristics of the six families over a twelve year period. For the want of space it is not possible to present the entire case histories of six families here and show the interaction which takes place among different variables in different life situations.

Among the six families under study, only the Williams and the Ayscues come close to the characteristics we have delineated in our typology of "prismatic" families. Both of these families live in somewhat rural isolated areas without farms. They have moderate extra-family interactions, moderate intimacy in social relationships, and experience some role ambiguity. Their personal contacts are moderate. They have moderate social visibility. They experience conflict between traditional and modern values and are somewhat predictable in their social routines. In addition, both these families are somewhat time conscious. They are quite informal in social relations and show low familism. The Roberts Family at the time of our interview stood somewhere between the semi-rural and "prismatic" stages. Our judgment about this family is that both the head and the homemaker would never enter the prismatic stage, but it is highly likely that the children of the family would directly move into the "prismatic" stage after they have left their present family.

Among the black families the Connors were moving along toward the "prismatic" stage after our interview in 1967, but with the death of the head and the unfortunate conditions brought about by a fire in the house, this family was downwardly mobile at the time of our final interview in 1972. As is the case with the Roberts, perhaps the children of this family would move into the "prismatic" stage (the girls are already married and have moved to nearby big towns). The Jones family is another case which showed some signs of upward mobility in 1972, but only the children of this family would likely enter into the "prismatic" stage. The Thompson family is a "stand still" type of family having little change during the twelve year period, except that more children were born into the family. It would probably take two generations of this family to enter into the "prismatic" stage. This family showed no signs of any mobility. It is still a basically rural black family.

Rural-Urban Continuum

In a sociological context the term rural-urban continuum has been a subject of much academic debate as is well reflected in the works of Dewey (1960), Pahl (1966), Lupri (1967), Constandse (1967), Lewis (1951), Stewart (1958), Duncan (1957), Miner (1952), Dobriner (1963), Fava (1956), Fuguitt (1962), Gans (1962a, 1962b), Lambert (1962), Stein (1960, and Mayer (1963) in addition to others. All these papers, books and monographs

IDEAL TYPES

Rural	Prismatic	Urban
1. Farm and rural areas.	1. No farm but rural areas.	1. Urban areas.
2. Relative isolation from outside world.	2. Moderate isolation.	2. No isolation.
3. Practically no mobility.	3. Moderate mobility.	3. High mobility.
4. Low extra-family interaction.	4. Moderate extra-family interaction.	4. Very high extra-family interaction.
5. High intimacy in social relationships.	5. Moderate intimacy in social relationships.	5. Low intimacy in social relationships.
6. Low role ambiguity.	6. Moderate role ambiguity.	6. High role ambiguity.
7. High personal contacts.	7. Moderate personal contacts.	7. Low personal contacts.
8. Low organizational parparticipation.	8. Moderate organizational participation.	8. High organizational participation.
9. Conscious organizational participation.	9. Moderate consciousness in organizational participation.	9. Unconscious organizational participation.
10. High social visibility.	10. Moderate social visibility.	10. Low social visibility.
11. Strong familism.	11. Low familism.	11. Conjugal.
12. Strong traditional values.	12. Moderate traditional values.	12. Low traditional values.
13. High relations with nature.	13. Moderate relations with nature.	13. Low relations with nature.
14. Single set of norms and values.	14. Conflict between traditional and modern values.	14. Plural norms and values.
15. Low predictability in social routines.	15. Moderate predictability in social routines.	15. High predictability in social routines.
16. Informal social control.	16. Moderately informal social control.	16. Formal social control.
17. Informality in social relations.	17. Moderate informality in social relations.	17. Formality in social relations.
18. Least time-conscious.	18. Moderately time-conscious.	18. Highly time-conscious.

reflect that the initial source of this unsettled controversey is the classical paper by Louis Wirth (1938) entitled "Urbanism as a Way of Life." Dewey (1960, p. 60) in his paper "The Rural-Urban Continuum: Real but Relatively Unimportant," posits:

> A study of current uses of the rural-urban concepts has provided evidence which justifies discussion of what may appear at first blush to be so well understood, so apparent, and so widely agreed upon that nothing of value can possibly be added.

The rural-urban continuum has been rigorously modified recently in view of the observation that social values constitute critical independent variables in accounting for differences among rural and urban structures (Lupri, 1967). The socio-cultural components have also been taken into account recently. Likewise, the significance of the temporal or dynamic element has been stressed in the recent years.

Some of the recent studies support the fact that human communities are in the process of gradual transformation from rural to urban and that there are no discontinuities between the two types (Mayer, 1963). According to Smith (1953, p. 17):

> . . .rural and urban do not exist of themselves in a vacuum, as it were, but the principle characteristics of each may be found shading into, blending, or mixing with the essential characteristics of the other. . .

From the statement by Smith, it can be deduced that differences in economic, social and attitudinal characteristics are directly related to the different social and cultural context of the communities. Different environments tend to produce different behaviors and attitudes.

Pahl (1966) has tried to show contradiction between typology and process in relation to the continuum. According to Constandse (1966):

> The continuum . . . is neither a typology nor a process, but only a line with two ends, which can be used as a yardstick for measuring a continuity; it can be used horizontally, for a typology, and vertically for a process. If attempts to produce typologies with the help of unidimensional continuum do not succeed, this is no reason for being against typologies as such, nor is it the reason to be against a continuum as such, it is the combination of two which is wrong.

In fact, we are making a modest attempt in this direction to show the middle stage on a continuum which we have been referring to as "prismatic" type for the lack of a better term. The heuristic values of this framework from the holistic standpoint is quite important in suggesting that there exists such a stage in the transformation process from rural to urban. Logic would suggest there is an apparent continuity in the notion of social change which is a gradual process. It is possible spatially to put a villager in a city within a few hours, but at the mental and attitudinal level it would take a couple of years or more for him to urbanize. As observations would suggest, this process never happens even spatially so suddenly, and it may entail even two generations for this movement from rural to urban areas. If the process is sudden, it may result in disastrous conflicts in the personality.

A number of propositions can be deduced based upon our observations and the typology of "prismatic" families presented previously. It is hoped that these will open avenues for further research in the exploration of the existence of such family types.

(1) The lines of tension between traditional and modern value systems are discernible in "prismatic" type of families.

(2) Anomic feelings in the "prismatic" families which are the part of the open-country side are caused by a discrepancy between the desire to participate in the possibilities of the urban-industrial world and the traditional values supplied by the rural community.

(3) The degree to which a "prismatic" family is on the rural or urban side of the scale of rural-urban continuum is a function of the amount of rural or urban values assimilated by the family.

(4) Class differences and class consciousness in the "prismatic" families are minimal but not completely absent.

(5) The intensity of conflict and anomia increases with the movement of the families from the rural end of the continuum towards the "prismatic" on the scale of rural-urban continuum.

Although our data do not completely substantiate the existence of such family types, even as a heuristic tool, the typology of "prismatic" families should encourage further research in this area. If we should have a theory of social change and transformations in social structures and social systems, then such a theory would do better in accounting for the temporal dimension of social reality as an important variable. This is an ideal, and any deviations from the ideal are, in fact, the means to attain that ideal The present study is not any great experiment, but is certainly exhibits an example as to how one might conceptualize reality and the importance of typologies for creating conceptual clarity.

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REVISED EDITION

RELATIONSHIPS BETWEEN FAMILY DISABILITY AND FAMILY INTERACTION PATTERNS: A METROPOLITAN-NONMETROPOLITAN COMPARISON OF SOUTHERN BLACK FAMILIES

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Association of Southern Agricultural Workers

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THE PROBLEM

Recent findings indicate that among Texas Blacks, family disability is prevelant: Metropolitan (M)=23% and (NM)=29%. These figures represent a rate four times that of individual disability in the same population: M=7% and NM=7% (Byrd, Taft, and Kuvlesky, 1972). With the current emphasis on health and welfare of the American people and with a problem of the magnitude indicated above, what research is needed in the area of family disability if one takes a problem-solving approach? Taft and Byrd (1972) have outlined an approach to this policy problem. They state, "The disabled population, particularly with regard to family disability, has not been discribed on key social variables." As a sociologist, one logical place to start analyzing family disability with reference to key social variables is to examine family internal interaction patterns, since the primary focus of sociology is on human interaction (Zanden, 1970).

The projected analysis will attempt to answer the following questions within the limits of the data on hand:

(1) What relationship exists between the degree of family disability and the degree of internal family interaction?
(2) Are there any M-NM place of residence differentials in internal family interaction by degree of family disability?
(3) Are there any family structural type differentials in internal family interaction by degree of family disability?

As will be seen shortly, disability by definition affects one's role behavior and, therefore, can be expected to affect internal interaction patterns (also behavior) between disabled family member(s) and non-disabled family members. Data on this problem are very scant and incomplete. From a policy problem perspective there just has not been enough research done in this problem area to make policy decisions. But the import of this study is not simply policy problem in nature. In addition, it seeks to examine a more basic theoretical problem of importance to general sociological theory: the impact of the biological and personality systems upon the functioning of an individual in the social system.

The remainder of this paper shall proceed as follows:

(1) The theoretical framework will be presented by examining Parsons' (1951) general theoretical framework and defining the relevant concepts utilized herein (family, role, interaction, and disability).

(2) The literature will be reviewed focusing on the effects of disability on both general variables and on the interaction variable, the influence of place of residence upon interaction, and the influence of family structure upon interaction.
(3) The methodology will be presented by describing the selection and interviewing of the respondents, the processing of the data, the instruments and measures, and the plan of analysis.
(4) The analysis and findings will be presented taking each of the three questions presented above in turn.
(5) A summary and conclusions will then be presented.

THEORETICAL FRAMEWORK

In all scientific research, even though problem solving in nature, the research should be related to a theoretical framework which will lend its explanatory power to the particular problem and which will also enable the researcher, when done with his research, to add his findings and conclusions to the more general theoretical framework. If a theoretical framework is not tapped, the research remains of very limited utility to both the discipline and to policy makers.

General Theoretical Framework

Parsons' (1951) system levels of action provides a useful context for the study of the effects of family disability. Figure 1 depicts the system levels delineated by Parsons. The cultural system is made up of ideal standards of orientation (cultural norms, values, ideologies, and beliefs) which are built into institutionalized systems. The social system contains the actual systems of interaction as well as the actions which take place in them. The personality system includes the psychological composition of the various individual human actors who make up systems of interaction or the parts of the systems. The biological system includes the physical bodies of the individual actors (for an in-depth discussion of system levels and how they relate to one another, see Taft and Kuvlesky, 1973).

The four system levels of action are not independent of one another. They interpenetrate one another, and one system often explains what is happening in another system. Being the highest system level, the cultural system may influence the social system and personality systems directly. Institutionalized norms, values, *etc.*, prescribe action which *should* take place in social systems. In addition, these norms, values, *etc.*, may be accepted by an individual personality in the form of attitudes, personal biases, *etc.* On the other hand, actions within the social system are generally patterned and tend to become institutionalized within the cultural system. The social system, in this event then, would directly affect the cultural system.

Figure 1. System Levels of Action.

CULTURAL SYSTEM:	National Culture Class Subcultures Racial Subcultures
	Regional Subcultures
	Place of Residence Subcultures
SOCIAL SYSTEM:	
	Communities
	Families
	Positions and Role-sets
PERSONALITY SYSTEM:	
	Personalities
BIOLOGICAL SYSTEM:	
	Organisms

The social system may directly affect the personality and the biological systems as well as the cultural system. As integral parts of an individual actor, the personality and biological systems are carried into interaction settings within the social system. The events which take place therein have a direct affect upon the continued development and functioning of the personality and biological systems. If a person is criticized and ostracized within a social system, then this will have a direct bearing upon his personality. He may tend to become defensive and develop an inferiority complex. On the other hand with regard to the biological system, if an individual is in an interaction setting within some social system and a riot develops, his biological system could very definitely be affected by a flying object.

The personality system may directly affect the social system and the biological system. Because of a person's particular personality which he carries into interaction settings, the events which take place vary and are altered somewhat by the personalities of the individual actors. In addition, the personality system may also affect the biological system. If an individual is experiencing an intense degree of anxiety within his personality system, his biological system might be directly influenced by the development of an ulcer.

The biological system may directly affect the personality system as well as the social system. The affect of the biological system upon the social system may readily be demonstrated by inserting an individual with the biological characteristic of black skin into an all-white social system. The resulting reaction is largely prescribed by the cultural system; however, the stimulus that triggered the reaction was purely biological. A more complete examination of the interpenetration of the personality and biological systems with the social system will be examined in the discussion of the concept of disability. The biological system may also influence the personality system. An individual with a biological deformity, such as a grotesque appearance or lack of limbs, might very well become an introvert and experience other personality problems.

Definition of Concepts

The concepts of major importance to this endeavor are family (structural types), role, interaction, and disability. Each of these are defined conceptually below.

Family. With due recognition of the diversity of viewpoints with regard to the definition of family, the definition herein sought is a structural one. Family, in an all-encompassing definition, should be defined both structurally and functionally; however, for the purposes of this particular proposed research, only a structural definition is needed (see Kephart, 1966:4-5, for functional definition). Basically, a family is a system of relations or a social system. Broom and Selznick (1963:355-6) make a distinction between nuclear and extended family structural types. A nuclear unit is defined as "consisting of husband and wife and those children toward whom they assume the role of parents" (p. 355). An extended unit is defined as "consisting of 'blood' relatives and their several nuclear family units" (p. 355).

In dealing with households as opposed to families, one can regard a household as nuclear or extended in structural type. In this work, when the term "family" is used, it refers to a household. The adjustment necessary to the nuclear-extended distinction stated by Broom and Selznick above is to simply add the condition that the members must be living in the same household. A nuclear family here, then, consists of a husband and wife and the children toward whom they hold parental positions. An extended family consists of "blood" and/or "legal" relatives who live with each other in the same household, the entire collectivity of which does not constitute a nuclear family. Figure 2 represents the structure of an extended family household with husband present.

To more completely ascertain family structural type, one additional element must be considered. The main distinction of family type used is the U. S. Census is based upon the presence or absence of a spouse to the head of the household (The United States Department of Commerce, 1970:102). For the sake of consistency herein, this distinction is rededfined to mean the presence or absence of the spouse of the female homemaker. This yields a much more consistent distinction since each household in the study groups by design has a female homemaker as the respondent.

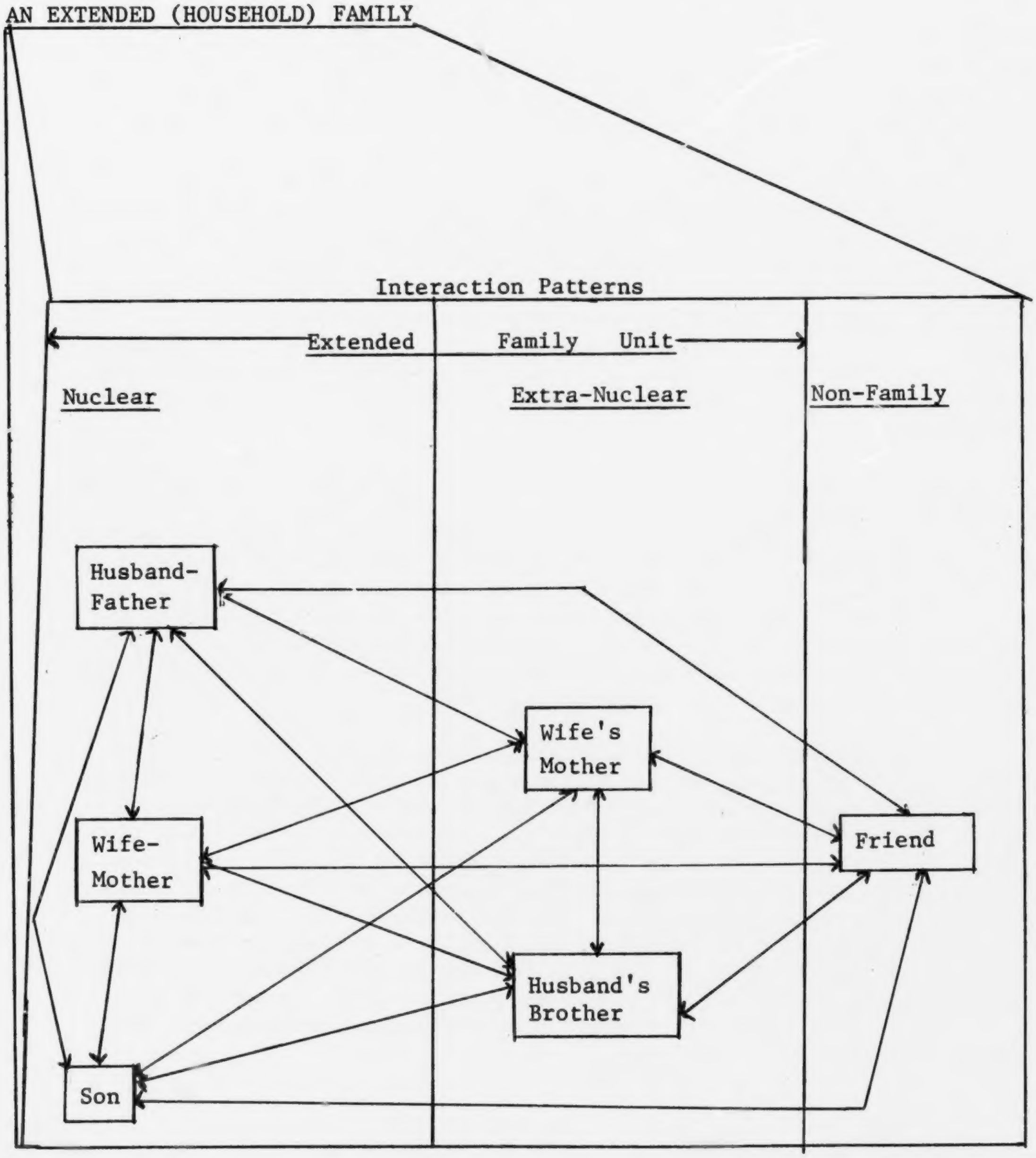
Role. "A role is a set of expectations. . . applied to an incumbent of a particular position" (Gross, Mason, and McEachern, 1966:61). Expectations are evaluative standards or ways actors should behave in a position (p. 58). A role sector is "a set of expectations applied to the relationship of a focal position to a single counter position" (p. 62). A role set is the complement of role relationships which persons have by virtue of occupying a particular social position (Merton, 1968:423). Multiple roles are the complex of roles associated with the various positions a person occupies (p. 423).

A role defines the rights and obligations of the incumbent of a position. These rights and obligations are defined in terms of expected behavior and expected attributes (Gross, Mason, and McEachern, 1966:67). Expected behavior is what the incumbent should do, and an expected attribute is what an incumbent should be (p. 67). Role behavior is the actual performance of an incumbent of a position, and a role attribute is an actual quality of an incumbent of a position (p. 64). Sanctions are role behaviors by incumbents of counter positions, the primary significance of which is for the gratification or deprivation of the incumbent of the focal position (p. 65). Sanctions are used to keep role behavior or attributes sufficiently consistent with expected behavior or attributes.

Figure 2. Positional Location and Interaction Patterns of Family (Household) Members.

Interaction = ⟷

SOCIAL:


AN EXTENDED (HOUSEHOLD) FAMILY
Interaction Patterns
Extended Family Unit
Nuclear
Extra-Nuclear
Non-Family
Husband-Father
Wife's Mother
Wife-Mother
Friend
Husband's Brother
Son

Interaction. Social interaction is an encounter between two or more people (Hodges, 1971:12). In interaction events each person acts and reacts to the behavior of the other (see Figure 2 on p. 6), generally according to an accepted role (Johnson, 1960:4; Zanden, 1970:8). In most cases, each person performs his role in a rather predictable manner depending upon the particular interaction setting (milieu of events and conditions in which the interaction event takes place). Although Hodges (1971:12) suggests that interaction is a face-to-face encounter, it can be thus without a physical face-to-face meeting, as in a telephone conversation.

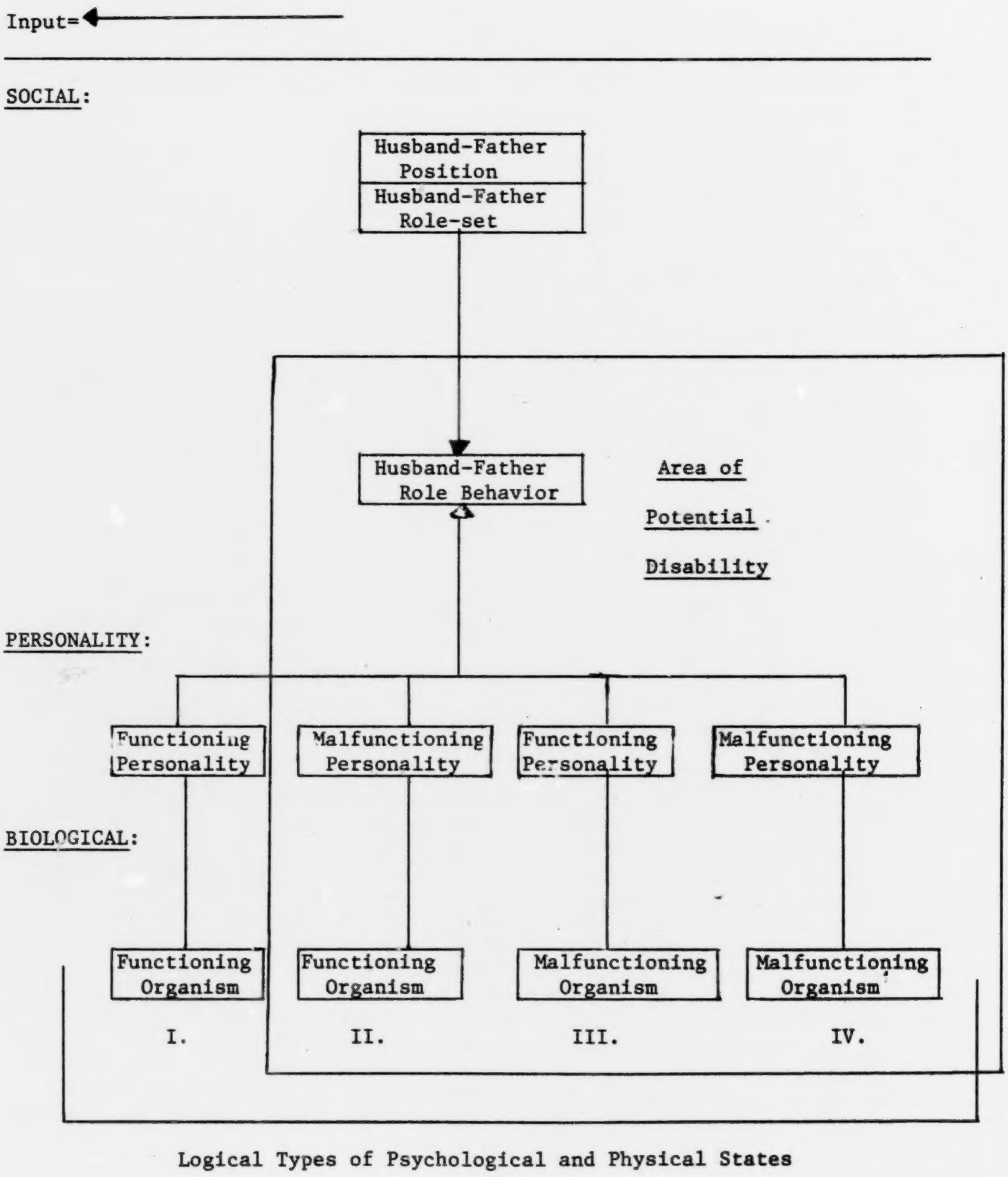
Disability. Disability is a gap between one's role-set and his role behavior as a result of a psychological or physical malfunction. If one is unable, because of psychological or physical malfunctioning, to adequately perform the roles attached to the positions he occupies, he is considered disabled. Disability, in this context, does not relate to social system or cultural system causes of lack of adequate role performance but only to personality and biological system causes. This does not mean that psychological or physical malfunctions are not brought on by social system or cultural system stresses upon the individual. Disability, then, has to do with the impact of the biological and personality systems upon an actor's role behavior in a social system and, therefore, the operation of the system itself. Figure 3 demonstrates this concept for the husband-father position within a family social system.

Four logical types of psychological and physical states are also presented in Figure 3:

I. Functioning personality and biological organism.
II. Malfunctioning personality and functioning biological organism.
III. Functioning personality and malfunctioning biological organism.
IV. Malfunctioning personality and biological organism.

A person falling into the first category of the typology is a normal well adjusted individual. He is both psychologically and physically healthy. A type two person has a psychological problem but is physically healthy. This is the person who has some mental or emotional problem. He might be a slow learner or have some psychological malady (such as, schizophrenia, paranoia, etc.). People who are psychologically well adjusted but are physically ill (tuberculosis, pneumonia, diabetes, etc.) or deformed (loss of limbs, blind, deaf, burned, etc.) fall into category three. The person categorized in the fourth type is both psychologically and physically maladjusted. He may have become thus in one of several ways. He could have started out with a psychological problem and allowed that to affect him physically. This person could be a paranoiac who is affected physically in the form of ulcers. On the other hand, this person may have been physically maladjusted (such as, grotesque appearance, loss of limbs, etc.) and in turn became

Figure 3. Disability Defined in Relation to System Levels for the Husband-Father Position in a Family Social System.


Input=
SOCIAL:
Husband-Father Position
Husband-Father Role-set
Husband-Father Role Behavior
Area of Potential Disability
PERSONALITY:
Functioning Personality
Malfunctioning Personality
Functioning Personality
Malfunctioning Personality
BIOLOGICAL:
Functioning Organism
Functioning Organism
Malfunctioning Organism
Malfunctioning Organism
I.
II.
III.
IV.
Logical Types of Psychological and Physical States

a paranoiac. Another possibility is that the individual experienced a single catastrophic event which left him both psychologically and physically injured. Finally, a type four person may have become psychologically and physically maladjusted as a result of two entirely independent causes. Although the gamut of possibilities is not presented here in example, these four logical types of psychological and physical states apparently cover all such possibilities. A factor which has not been discussed is that of the degree of malfunction. Functioning-malfunctioning may be seen as a continuum. The major concern herein, however, is the degree to which role behavior of an actor in a social system is affected by personality and biological system malfunctions, regardless of the degree of malfunction. This is the focus of the concept of disability as shown in Figure 3 (area of potential disability) on page 8.

Family disability is seen as a composite of the disabilities of the individual family members. Each family member will be either affected or not affected in his role behavior by psychological or physical malfunctions. A malfunction in the personality or biological systems of an individual does not necessarily mean that his role behavior will be affected. In addition, role behavior relative to positions within the family is not the only type of role behavior which can be affected by personality or biological system malfunctions. A husband-father may be able to adequately perform his role-set within the family structure but not be able to perform his role-set in connection with a position within another social system. This would still be disability. Family disability, then, is the degree to which all family members' role behaviors are affected by their own individual personality and biological systems' malfunctions.

REVIEW OF LITERATURE

Three areas of literature need to be reviewed therefore attempting the present investigation: literature on the effects of disability, literature on the influence of place of residence upon interaction, and literature on the influence of family structure upon interaction. These three areas of literature are examined below.

Literature on the Effects of Disability

General. Disability has been linked with low-income and low occupational prestige. The U. S. Department of HEW's National Center for Health Statistics (1964) reported a substantial relationship between ill health and poverty or low-income, especially, for older age groups. Deacon, et al. (1967), found that maternal chronic illness was a factor having a compounding effect on the problem of low income among 402 low-income Appalachian families. Johnson (1965) studied rural AFDC families in the Kentucky mountains and concluded that a disability of the head of the household effects the family most seriously in the financial realm. Bienstock of the Bureau of Labor Statistics (1967) reported that in the

U. S., ill health is second only to the lack of education as a cause of underemployment.

Effects of member disability upon family structure have been noted. In a conceptual piece, Rosenstock and Kutner (1967) argued that in a crisis event--one in which a family does not have a solution to some problem readily available within its existing resources--a family often experiences a general disorganization. This disorganization is followed by recovery and reorganization, or alienation and dissolution.

As previously defined, modifications of role behavior are inherent in the concept of disability. This in itself presents a crisis situation. The role expectations are structural components attached to the position(s) the disabled individual is holding in the family. By definition, some roles are not performed by a disabled family member. Depending on the importance of these unperformed roles to the functioning of the family, the family experiences disruption or crisis. At least four ways of reacting to this crisis are open to the family. It may continue in the state of crisis thereby intensifying the accompanying stress upon the family's functioning. It is reasonable to expect that the family cannot exist in such a state for a long period of time before adapting in one of the following three ways: (1) the individual with the disability may be given some sort of treatment to sufficiently correct the physical or psychological malfunction in order to enable him to again adequately perform his existing role(s). (2) The disabled member's role(s) may be redefined by the relevant role definers to adjust to his existing role behavior. This would change the structure of the role-set(s) held by the disabled member so that he could perform them adequately. (3) The disabled member may abandon the position(s) containing the role-set(s) he cannot adequately perform. The conceptual alternatives offered by Rosenstock and Kutner (1967), therefore, appear too vague and general for application to disability as a crisis event.

Nagi and Clark (1964) studied 294, White, Ohio families with disabled members and found that young people, married at the onset of a disability in one of the partners, were more likely to divorce or separate. They also found that families with higher occupation, income, and education, more small children, and their own homes, were less likely to dissolve than others. This indicates, as one would expect, that there are factors which influence a family's selection of the alternative ways of reacting to member disability. Another factor was suggested by Gibson and Ludwig (1968). Among 660 disabled families, they found that disabled Negroes were the least likely to be married.

Interaction. Hrubec (1959), in a study of 2,370 families in a Pittsburgh health district, found that the disabled as well as their families had more social problems than non-disabled people and their families. Ludwig and Collette (1969) discovered that disabled husbands in Central Ohio, dependent upon their wives (N=79), spent less time with their friends and relatives and were not as involved in the family decision-making process as disabled husbands who were not dependent upon their wives (N=86). Deacon, et al. (1967), found that, among 402 low-income, Appalachian families, those with a disabled mother were less likely to eat their meals together than families with a non-disabled mother.

Because of the intimate face-to-face relations assumed to exist among family members (Krech, Crutchfield, and Ballachey, 1962:214), it is argued that any role behavior which does not meet role expectations will influence these interaction patterns. The research cited above indicates that disability does, in fact, tend to stifle interaction in general. The Deacon, et al. (1967), findings indicate that disability also hampers internal family interaction. Taken in another light, disabled members holding parental positions appear to influence the nature of family interaction patterns more than family members filling other positions. In this connection, Deutsch and Goldston (1960), in a study of 40 New York polio patients, found that the greatest distance between role expectations and role behavior existed for disabled persons holding husband-father positions. In addition, and directly related to this, they found that disabled husband-fathers' families experienced the most change and disorganization in family life. It is possible that disabled female-homemakers' families would experience the greatest change and disorganization in family life in lower-class Negro families because of their apparent matriarchal structure (Kephart, 1966:210).

Summary. It has been found that disability affects the financial stability of a family and often causes low-income and underemployment. It has been shown that disability affects the family structure resulting in potential structural disorganization which is dealt with in several ways. Race, SES, age of the parents, and number of small children in the family have been demonstrated to affect the method of adjustment to structural disorganization caused by disability: Black families, lower SES families, families with younger parents, and families with fewer small children electing to dissolve more often than other types of families. It has been found that families with disabled members have more social problems and are less likely to eat their meals together than those without. It has been found that a more acute degree of disability lessens interaction with friends and relatives. Finally, it has been discovered that when husband-fathers become disabled, their families experience more change and disorganization in family life as a result than if the disabled person were in any other position (this may not apply to lower-class Negroes).

Obviously, from the above review, the literature is lacking in many

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*The problem of the effect of positional location of disabled family members upon family interaction is at present being explored by Earl Taft. The data on this problem, however, were not ready for inclusion in the present analysis and will be presented in a future effort (Taft, 1973).

of the effects of disability. It does suggest, however, that internal structure and interaction are affected by member disability but is vague as to what the effects actually are. The major deficiency in the literature is that the vast majority does not contain data from both a disabled and a non-disabled group. This leaves it devoid of a comparative base in many cases. In addition, Black populations have generally been bypassed. The populations herein studied add to the scope of previous research in this respect.

Literature on the Influence of Place of Residence Upon Interaction

In the earlier part of the century rural-urban differences in interaction patterns were sizeable. Urban contacts were frequent, transient, and formal, while rural ones were relatively seldom, intimate, and regularly recurring. Rural association was familial, communal, primary, and comparatively permanent while urban ones were more individual, secondary, and largely functional (Sims, 1944:14). The rural contacts were narrow and generally given to clannishness (Graves, 1922:94). Urban residents generally belonged to more organized groups and took a more active part in group affairs, small town residents were not as active, and open-country residents were even less so (Bertrand, 1958:151). Bertrand (1958:152) also indicates that good transportation facilities tend to reduce interaction differences between small-town and open-country residents. Slocum (1962:288) found that urban families generally emphasized individual rather than the group values and activities; whereas, rural farm families emphasized strong kinship ties, solidarity, and participation of the family as a group in activities. Taylor and Jones (1964:52) summarized these differences by saying that in rural areas a "Man is interacted with as a human person" while in urban areas he is interacted with as a "number" and "address."

The rural-urban differences in interaction have diminished in validity recently (Taylor and Jones, 1964:52). Kuvlesky (1972:3) says that "place of residence is becoming less significant as a basis for social differentation of behavior in our society." Copp (1964) also states that the rural-urban differences are decreasing. Although these differences are decreasing, M-NM residence still does differentiate among interaction and participation patterns. Moon and McCann (1966) found that, among Appalachian people, more rural areas had less participation than more urban areas. Because of the remaining and/or changing differences between rural and urban populations with regard to interaction, and because the data available for this investigation permits, M-NM differences in the effects of disability upon interaction will be explored.

Literature on the Influence of Family Structure Upon Interaction

Research on the influence of family structure upon interaction is sparse. Heller's findings (1970) imply that extended type families have higher interaction rates than nuclear type families. Having found a high correlation between familism and interaction, he found that extended type families experienced greater degrees of familism than nuclear type families. Heiss' (1968) findings indicate the opposite. He discovered that interaction rates were lower among larger families (extended type) than smaller ones (extended and nuclear types). Although not directly relating family type and interaction, these two researchers have clearly shown a need for controlling for family type in interaction studies.

Logically, it is imparative to control on family structure. There is quite a difference between the positions which make up the interacting units of a nuclear as opposed to an extended family. The main difference warranting control is between the structural positions which make up a nuclear family and the ones which make up an extended family. Interaction is patterned by the role-sets of the family members' positions in the family. These role-sets define how each member should act toward each other family member as holders of their particular positions. Nuclear families only have four kinship structural positions: husband-father, wife-mother, brother-son, and sister-daughter. Extended families have many additional positions which, when added to the above, alter the role-sets of the above nuclear positions (by simply adding other counter positions to each focal position). In addition, the exclusion of a husband-father from a nuclear or extended family changes the role-sets of the remaining members. With no direct evidence of the effects of these factors on interaction among the members of nuclear and extended families, it is expedient to include family type as a control.

METHODOLOGY

Selection and Interviewing of the Respondents

Data for this investigation were obtained from part of a recent USDA-CSRS Regional Project (NC-90). The regional study was structured to comprehensively study the nature of Black families in a large metropolitan center, a small town, and two small open-country villages in East Texas.

Nonmetropolitan. The nonmetropolitan county in which the town and villages are located was purposely selected for its characteristics. It was judged to be relatively representative of the "traditional southern culture" (Kuvlesky and Cannon, 1971). It is largely agricultural and rural (75%). It has a high rate of low-income families when compared to the state, and about 5,000 out of the county's 20,000 population are Negroes.

The largest population center in the county was selected--a town of about 5,000 with thirty per cent Blacks--as well as two all-Black, open-country villages. The town and village Blacks served as the universe from which the respondents were selected according to the screening criteria set up by the NC-90 regional technical committee. Each respondent had to be a female homemaker, not over 65, and not under 18 (unless the mother of at least one child), having children under 18 years old in the household. Most of the qualified respondents were interviewed during June of 1970. Table 1 summarizes the disposition of the households screened in both the metropolitan and nonmetropolitan areas.

During the Spring of 1970, the Black households in the nonmetropolitan town and villages were mapped. Interviewers were recruited from Black female teachers in an adjacent county. These interviewers were trained, field tested, and weeded out in one week (several were released). Each interview took about one and a half hours, and the interviewers generally reported good cooperation from the respondents.

One of the researchers was available to assist the interviewers at all times during the interviewing. Each night the questionnaires were carefully evaluated. Each morning, a meeting was held to rectify any problems found and to discuss matters pertaining to the interviewing.

Table 1. Disposition of Families Contacted in Nonmetropolitan and Metropolitan Areas.

Action	Nonmetropolitan	Metropolitan	Total
Households Contacted	556	802	1358
Households Eligible	264	302	566
Homemakers Interviewed	259	294	553
Families Analyzed	259	294	553
Individuals in Families Analyzed	1393	1372	2765

Metropolitan. The metropolitan county selected is the largest in the South (1,832,000) and is located in Southeast Texas. It has one of the lowest percentages of low-income families in the state. The population is approximately twenty-one per cent Black.

As the county seat, Houston houses the majority of the county's population. It is the largest inland port in the nation. It is a major industrial and commercial center. One of the country's larger and finer medical centers is located in Houston. About twenty-seven per cent of Houston's population is Black. It is seen as "part of the larger cultural configuration characteristic of the traditional South" (Kuvlesky, Warren, and Ragland, 1972).

A set of contiguous neighborhoods adjacent to the central business district was selected from which to draw a fifty percent sample of households. These neighborhoods were almost completely Black and predominately low-income. They were, therefore, not representative of the Black metropolitan population. The Black upper and middle socioeconomic strata were under-represented.

In the Spring of 1971, the selected neighborhoods were mapped. All non-dwelling buildings were identified, and a fifty percent sample of dwellings was drawn. Black female interviewers were enlisted from other areas of the metropolis and given a week of training and field testing on the regional questionnaire. A few of the interviewers were released by the end of the training period, and two more were released after about a week of interviewing. The questionnaires were evaluated by one of the researchers each evening and discussed with the interviewers the next morning. Validation and reliability checks showed none of the items to be used here problematic. The bulk of the interviewing in Houston was done during June, 1971. The metropolitan respondents generally were reported as cooperative. Figure 4 presents the location of the study groups in the general conceptual framework being utilized herein.

Processing of the Data

Coding instructions for the questionnaire were established at the regional level and followed explicitly in the coding of the data in Texas. Once coded and checked for accuracy, the data were punched on data precessing cards. Several corrections have been made as a result of errors found while analyzing the data in other connections. The data at present should be relatively free of coding and punching errors. In addition, consistency checks have been performed throughout the data processing sequence, and therefore, the data should be relatively free of inconsistencies due to recording and coding errors.

The data are now available on punched data cards separated by metropolitan-nonmetropolitan place of residence. Necessary data processing for this study utilized the Texas A&M University computer, and the Rural Sociology Departmental Programmer.*

Instruments and Measures

Family Disability. Family disability was measured by a family disability index. The stimulus question was "Is anyone in this family sick all the time or disabled in any way?" This question has two dimensions: the physical or biological (illness) and the impact of illness *per se* on role behavior (disability). If the respondent answered "yes", she was asked to describe the seriousness of the

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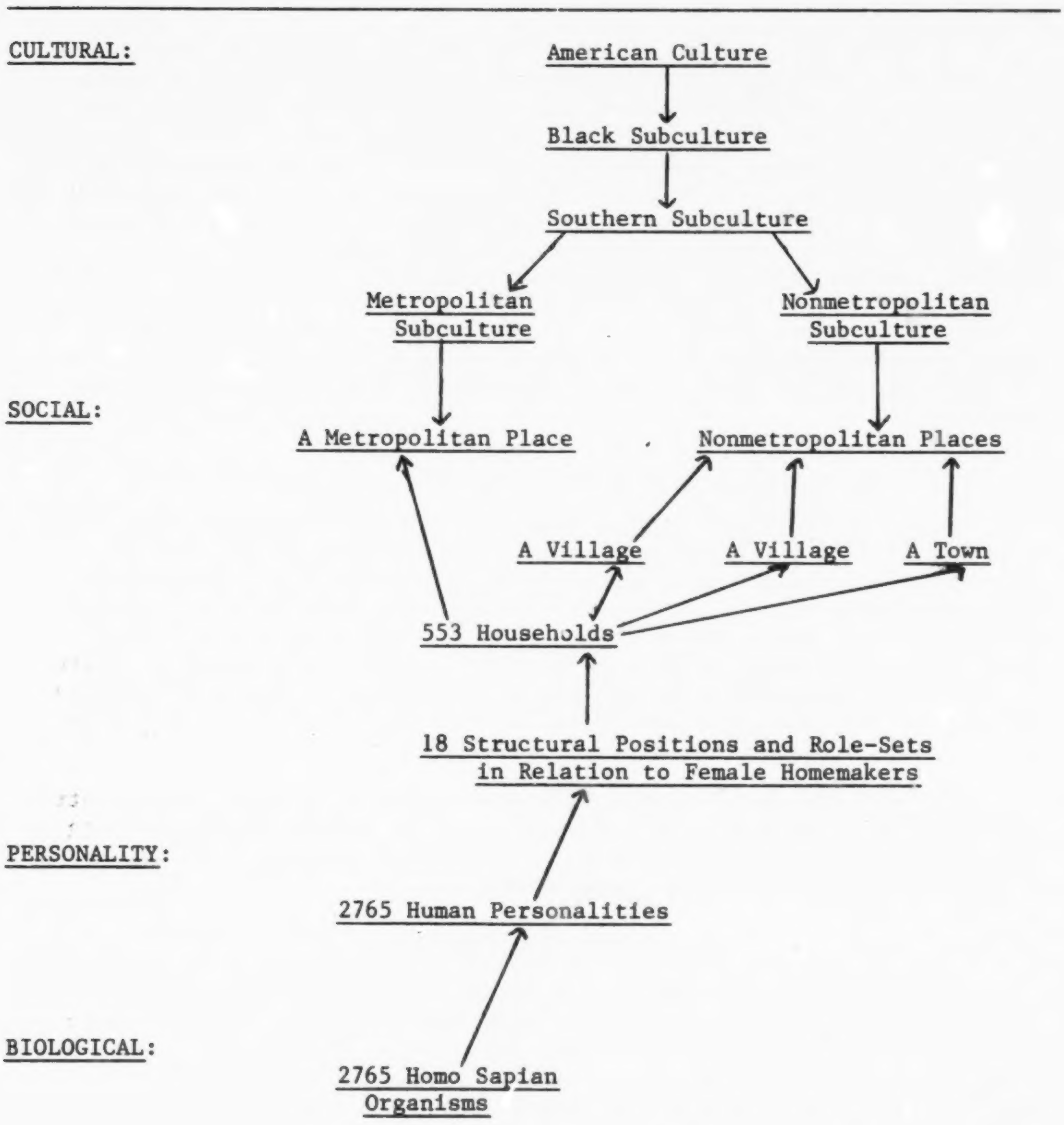
*We would like to express our appreciation to Mr. John Womack for his programming work.

Figure 4. Location of Study Population in the System Levels of Action and Structural Inputs Into It.

Input = →


CULTURAL:
American Culture
Black Subculture
Southern Subculture
Metropolitan Subculture
Nonmetropolitan Subculture
SOCIAL:
A Metropolitan Place
Nonmetropolitan Places
A Village
A Village
A Town
553 Households
18 Structural Positions and Role-Sets in Relation to Female Homemakers
PERSONALITY:
2765 Human Personalities
BIOLOGICAL:
2765 Homo Sapian Organisms

disability by selecting the appropriate degree for the disabled member from the following alternatives:

(1) Not able to work, keep house, go to school, or play, at all (choice depended on person's age group). {Code 4}
(2) Able to work, etc., but limited in kind or amount of work, etc. {Code 3}
(3) Able to work, etc., but limited in other activities (not applicable to preschoolers). {Code 2}
(4) Not limited in any of the above ways. {Code 1}
(5) Not disabled. {Code 0}

All of these degrees of disability are determined explicitly by role behavior except "Code 1." It is assumed, however, that some role behavior is affected for a person to be considered in this category instead of the "not disabled" one. Although not as precise and conceptually accurate as these authors desire, the indicator and measures for disability seem to fulfill the minimal conceptual requirements.

The coded degrees of disability (0-4) for a family's members were summed and divided by the number of family members with responses coded. This figure was then multiplied by 25 to place the score between 0 and 100 for ease of interpretation (see Taft and Byrd, 19[illegible], for a discussion of the index). The measures for family disability were the various family disability index scores. The range was broken down into four categories: "0" for no disability, "1-10" for a low degree of disability, "11-20" for a moderate degree of disability, and "21 and over" for a high degree of disability. The reasons behind the breakdown are twofold. Progressively higher degrees of disability are needed to adequately examine its effect upon interaction. The number in each category needed to be sufficiently large to allow them to be compared to the degrees of interaction. Having examined the distribution of disability index scores, the above breakdown was the only one which apparently met these two criteria. Summary tables are presented in the analysis section of this paper which break the degrees of family disability down to a "yes" or "no" level. The four-category breakdown described above is presented tabularly in Appendices A,B,C, and D.

Internal family interaction. Internal family interaction was measured by a four item scale as follows:

1. How often do you go places together as a family?
2. How often does your family eat at least one meal a day together?
3. How often do family members work around the home together?
4. How often do family members relax around the home together, talking, watching TV, or doing things like this?

These four items involve activities done as a family as opposed to individual activities. Although the gamut of possible interaction events is not presented, it is felt that these items are at least minimal indicators of general family internal interaction. It is realized that the subjective evaluation of the homemaker-respondent may not represent what actually existed. This is a question which shall not concern these authors since we accept the respondents as sufficiently meeting the criteron of credibility. Of the possible indicators of internal interaction, these four items are the only ones which deal with an absolute degree of interaction behavior among the family members. The only other items which deal with actual interaction behavior had to do with which parent handled the children when both were around and which parent made various decisions. These did not indicate, however, what degree of interaction took place in handling the children or in making the decision of who decided. Other items on interaction deal with attitudinal and value orientations about interaction.

The response categories for the four interaction items selected are "often" (Code 4), "sometimes" (3), "seldom" (2), and "never" (1). In addition to the individual item scores, a scale score will be utilized. It will be calculated by simply averaging the four item scores for each family. In presentation the "never" and "seldom" categories are combined into the "low" degree; "sometimes" represents the "medium" degree, and "often" represents the "high" degree of interaction. This adjustment was made primarily because of the small N's represented in the "never" category. The logical response category "always" was not included in the questionnaire. "Sometimes" seems most logically to fit in the middle; therefore, the present breakdown was selected.

Control Variables. Two control variables are being utilized herein: M-NM place of residence and family type. The data were separated by M-NM place of residence and were analyzed separately. Two criteria were utilized in determining family type: nuclear-extended and complete-incomplete.

The respondent was asked to list all of the family members and designate the relationship of each member to herself. These relationships were catagorized into eighteen relationships to the homemaker as follows:

(1) Respondent
(2) Spouse
(3) Son/Daughter
(4) Grandchild
(5) Parent
(6) Parent-in-Law
(7) Brother/Sister
(8) Brother/Sister-in-Law
(9) Son/Daughter-in-Law
(10) Grandparents/Great Aunt/Great Uncle
(11) Aunt/Uncle
(12) Nephews/Nieces
(13) Cousins
(14) Foster Children
(15) Step Children
(16) Other Relatives
(17) Friends
(18) Male Companion

In correspondence with the concept of family presented in the "Definition of Concepts" above, a complete nuclear family is made up of the following members: respondent, spouse or male companion (a male companion is viewed as having essentially the same relationship to the homemaker as the spouse), and son and/or daughter and/or stepchildren. In addition, a nuclear family may have foster children and/or friends without affecting its status as a nuclear family (these two relationships are considered non-family relationships). The classification of friends as a non-family relationship is obvious. With regard to foster children it is reasoned that, although they are treated as sons or daughters, they are wards of the state, and therefore, the family has no "legal" or "blood" relationship to them. An incomplete nuclear family must have a respondent, a son and/or daughter and/or stepchildren but cannot have a spouse or male companion. A complete extended family has a respondent, a spouse, and any of the other relationships listed above (again, foster children and friends do not affect the status of the family)--if the family has a son and/or daughter and/or stepchildren, it must also have at least one of the other relationships (four through sixteen, excluding fourteen and fifteen). An incomplete extended family has the same combinations of members as a complete extended family with the exception of a spouse or male companion.

Operationally then, it was a simple matter to control for both place of residence and family type. The places of residence were simply kept separate, and the families were divided into the four structural types, as indicated above, and analyzed separately.

Plan of Analysis

The analysis attempts to answer the following questions presented in "The Problem" section within the limits of the data on hand:

(1) What relationship exists between the degree of family disability and the degree of internal family interaction?
(2) Are there any M-NM place of residence differentials in internal family interaction by degree of family disability?
(3) Are there any family structural type differentials in internal family interaction by degree of family disability?

The data comparing degrees of family disability with degrees of family interaction are divided by family type (complete nuclear in Appendix A, incomplete nuclear in Appendix B, complete extended in Appendix C, and incomplete extended in Appendix D) and controlled on M-NM place of residence. These tables were used in determining the relationships between family disability and family interaction for the various groups of families. In the text of the "Analysis and Findings" summary tables will be presented for quick reference. The only degrees of disability used in the summary tables are "no" disability and "yes" disability. The places of residence and the family types are presented side by for analysis of all three questions at the same time.

The focus of the analysis is on the means presented in each of the tables described above which are subjectively analyzed for central tendency. The trends in the data are scrutinized. In addition, problematic families with regard to interaction--those with low interaction rates--will be examined to determine their similarities and differences in reference to degree of disability by place of residence and family type.

First, the relationship between degree of family disability and degree of internal family interaction will be explored. It is expected that families with higher degrees of disability will experience lower degrees of internal interaction. This is primarily based upon the idea that interaction is adversely effected when a person is involved who cannot adequately perform his roles.

Secondly, the differences between the M and NM samples on the relationships explored above will be examined. As a result of the review of literature in this regard, it is expected that NM families will tend to have higher interaction rates than M families.

Lastly, the differences among the family structural types on the relationships explored above will be analyzed. Again, based on the literature and the assumed nature of extended families, it is expected that extended families will tend to have higher rates of interaction than nuclear families with incompleteness adversely affecting interaction.

ANALYSIS AND FINDINGS

For each of the three major divisions below, composite family interaction, as well as the individual interaction items, are examined. In each case degrees of interaction are compared across the different degrees of family disability, as well as between disabled and non-disabled families.

Family Disability and Family Interaction

Composite family interaction. No consistent pattern of composite family interaction is evident in relation to the three degrees of disability (Table 5 in each appendix). It is impossible, therefore, to make any general statements about the relationship between degrees of disability and degrees of composite interaction.

Having found no conclusive evidence as to the relationship between degrees of disability and degrees of interaction, it might be helpful to examine the differences between disabled and non-disabled families' composite interaction patterns. Table 2 presents an overview in this regard. Six out of the eight categories show higher interaction means for the disabled families than for the non-disabled families. This is a trend in the opposite direction than was predicted. Complete extended families in both M and NM cases do not follow the trend. The differences between the interaction means for disabled and non-disabled families of all eight categories are relatively low and insignificant. Although a trend was noted, this does not indicate a strong consistent pattern. It is prudent at this point, then, to examine these relationships for each of the four interaction items to determine if a consistent pattern can be detected.

Family interaction items. Table 1 in each of the appendices presents the first interaction item: "How often do you go places together as a family?" Again, no consistent pattern of relationship between degree of disability and interaction has been established.

With regard to interaction by disabled and non-disabled families (Table 3), no consistent patterns are established. The eight categories of families are divided equally. There are three categories showing higher interaction means for disabled, three showing higher interaction means of non-disabled, and two show on the same interaction means for both. The conclusion for interaction of this type must be that a consistent pattern is not demonstrated.

Table 2 in each of the appendices compare degrees of disability to degrees of interaction as measured by the question "How often does your family eat at least one meal a day together?" No pattern is presented with regard to the relationship between degree of disability and degree of interaction.

Table 2. **Summary Overview of Family Disability and Average Family Interaction.**

PLACES OF RESIDENCE	METROPOLITAN (N=287)								NONMETROPOLITAN (N=258)							
FAMILY TYPE	COMPLETE NUCLEAR (N=105)		INCOMPLETE NUCLEAR (N=107)		COMPLETE EXTENDED (N=24)		INCOMPLETE EXTENDED (N=51)		COMPLETE NUCLEAR (N=133)		INCOMPLETE NUCLEAR (N=38)		COMPLETE EXTENDED (N=46)		INCOMPLETE EXTENDED (N=41)	
FAMILY DISABILITY / DEGREE INTERACTION	NO (N=90)	YES (N=15)	NO (N=82)	YES (N=25)	NO (N=13)	YES (N=11)	NO (N=35)	YES (N=16)	NO (N=114)	YES (N=19)	NO (N=28)	YES (N=10)	NO (N=27)	YES (N=19)	NO (N=15)	YES (N=26)
	PERCENT															
LOW (1)*	3	0	4	4	0	9	8	0	3	0	0	0	4	5	7	4
MEDIUM (2)	29	27	25	12	23	18	26	31	23	21	25	10	18	16	27	27
HIGH (3)	68	73	71	84	77	73	66	69	74	79	75	90	78	79	66	69
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MEAN INTERACTION	2.71	2.73	2.67	2.76	2.77	2.64	2.57	2.69	2.65	2.79	2.75	2.90	2.74	2.74	2.60	2.65

*There were no families with an average interaction of 1.00 (no interaction); therefore, this category contains only families with an average interaction of 1.01 - 2.00.

ANALYSIS AND FINDINGS

For each of the three major divisions below, composite family interaction, as well as the individual interaction items, are examined. In each case degrees of interaction are compared across the different degrees of family disability, as well as between disabled and non-disabled families.

Family Disability and Family Interaction

Composite family interaction. No consistent pattern of composite family interaction is evident in relation to the three degrees of disability (Table 5 in each appendix). It is impossible, therefore, to make any general statements about the relationship between degrees of disability and degrees of composite interaction.

Having found no conclusive evidence as to the relationship between degrees of disability and degrees of interaction, it might be helpful to examine the differences between disabled and non-disabled families' composite interaction patterns. Table 2 presents an overview in this regard. Six out of the eight categories show higher interaction means for the disabled families than for the non-disabled families. This is a trend in the opposite direction than was predicted. Complete extended families in both M and NM cases do not follow the trend. The differences between the interaction means for disabled and non-disabled families of all eight categories are relatively low and insignificant. Although a trend was noted, this does not indicate a strong consistent pattern. It is prudent at this point, then, to examine these relationships for each of the four interaction items to determine if a consistent pattern can be detected.

Family interaction items. Table 1 in each of the appendices presents the first interaction item: "How often do you go places together as a family?" Again, no consistent pattern of relationship between degree of disability and interaction has been established.

With regard to interaction by disabled and non-disabled families (Table 3), no consistent patterns are established. The eight categories of families are divided equally. There are three categories showing higher interaction means for disabled, three showing higher interaction means of non-disabled, and two show on the same interaction means for both. The conclusion for interaction of this type must be that a consistent pattern is not demonstrated.

Table 2 in each of the appendices compare degrees of disability to degrees of interaction as measured by the question "How often does your family eat at least one meal a day together?" No pattern is presented with regard to the relationship between degree of disability and degree of interaction.

Table 2. **Summary Overview of Family Disability and Average Family Interaction.**

PLACES OF RESIDENCE	METROPOLITAN (N=287)								NONMETROPOLITAN (N=258)							
FAMILY TYPE	COMPLETE NUCLEAR (N=105)		INCOMPLETE NUCLEAR (N=107)		COMPLETE EXTENDED (N=24)		INCOMPLETE EXTENDED (N=51)		COMPLETE NUCLEAR (N=133)		INCOMPLETE NUCLEAR (N=38)		COMPLETE EXTENDED (N=46)		INCOMPLETE EXTENDED (N=41)	
FAMILY DISABILITY / DEGREE INTERACTION	NO (N=90)	YES (N=15)	NO (N=82)	YES (N=25)	NO (N=13)	YES (N=11)	NO (N=35)	YES (N=16)	NO (N=114)	YES (N=19)	NO (N=28)	YES (N=10)	NO (N=27)	YES (N=19)	NO (N=15)	YES (N=26)
								PERCENT								
LOW (1)*	3	0	4	4	0	9	8	0	3	0	0	0	4	5	7	4
MEDIUM (2)	29	27	25	12	23	18	26	31	23	21	25	10	18	16	27	27
HIGH (3)	68	73	71	84	77	73	66	69	74	79	75	90	78	79	66	69
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MEAN INTERACTION	2.71	2.73	2.67	2.76	2.77	2.64	2.57	2.69	2.65	2.79	2.75	2.90	2.74	2.74	2.60	2.65

*There were no families with an average interaction of 1.00 (no interaction); therefore, this category contains only families with an average interaction of 1.01 – 2.00

Table 3. Summary Overview of Family Disability and Family Interaction as measured by the Question, "How often do you go places together as a family?"

PLACES OF RESIDENCE	METROPOLITAN (N=287)								NONMETROPOLITAN (N=258)							
FAMILY TYPE	COMPLETE NUCLEAR (N=105)		INCOMPLETE NUCLEAR (N=107)		COMPLETE EXTENDED (N=26)		INCOMPLETE EXTENDED (N=51)		COMPLETE NUCLEAR (N=133)		INCOMPLETE NUCLEAR (N=38)		COMPLETE EXTENDED (N=46)		INCOMPLETE EXTENDED (N=41)	
FAMILY DISABILITY / DEGREE INTERACTION	NO (N=90)	YES (N=15)	NO (N=82)	YES (N=25)	NO (N=15)	YES (N=11)	NO (N=35)	YES (N=15)	NO (N=114)	YES (N=19)	NO (N=28)	YES (N=10)	NO (N=27)	YES (N=19)	NO (N=15)	YES (N=26)
								PERCENT								
LOW (1)	29	47	29	20	46	18	26	37	30	10	4	20	30	21	20	19
MEDIUM (2)	34	20	32	44	39	55	34	19	40	37	50	20	30	47	33	42
HIGH (3)	37	33	39	36	15	27	40	44	30	53	46	60	40	32	47	39
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MEAN INTERACTION	2.08	1.87	2.10	2.16	1.69	2.09	2.14	2.06	2.00	2.42	2.43	2.40	2.11	2.11	2.27	2.19

With regard to interaction by disability or no disability (Table 4), no consistent patterns emerge. It must be concluded, therefore, that no firm trends have been established as to how often disabled and non-disabled families eat together.

The third interaction item is "How often do family members work around the home together?" The degrees of disability are compared to the degrees of this interaction item in Table 3 in each of the appendices. No clear patterns of interaction by degree of disability emerge here either. What about the patterns when comparing disabled to non-disabled families?

In Table 5 the M complete and incomplete extended and the NM incomplete extended families are similar in exhibiting very little difference between their disabled and non-disabled interaction means as well as the percentages in the low interaction category. All of the rest of the types of families demonstrate a positive relationship between degree of disability (yes and no) and degree of interaction. Only one group (NM complete nuclear) shows a relatively substantial difference between the interaction means which is also reflected in the lowest interaction category. It can be concluded that a relatively minor trend is evident with regard to interaction of this type. The disabled families tend to work around their homes together more often than non-disabled families. This is a trend in direct opposition to that expected.

Degrees of the last interaction item in the scale are compared to degrees of disability in Table 4 of each appendix. It is "How often do family members relax around the home together?" Half of the groups have a very dubious tendency toward negative relationships as predicted, and three of the remaining four show an extremely doubtful positive tendency. It would be extremely risky to say anything general about these very minor trends. It is safe to conclude only that no consistent pattern of relationship has been observed. But what about disabled families as compared to non-disabled families?

Only half of the groups demonstrate consistency across both their interaction means and the percentages in the low interaction category (Table 6). The rest are either inconsistent or demonstrate very similar means and percentages.

Since no general patterns have been observed between disability and interaction, are there any M-NM place of residence differentials in this regard?

M-NM Place of Residence Differentials

In this and the next (family type differentials) section, only the five summary tables presented above will be used to establish what the M-NM differentials are, if any.

Table 5. Summary Overview of Family Disability and Family Interaction as measured by the Question, "How often do family members works around the home together?"

PLACES OF RESIDENCE	METROPOLITAN* (N=284)								NONMETROPOLITAN (N=258)							
FAMILY TYPE	COMPLETE NUCLEAR* (N=103)		INCOMPLETE NUCLEAR* (N=106)		COMPLETE EXTENDED (N=24)		INCOMPLETE EXTENDED (N=51)		COMPLETE NUCLEAR (N=133)		INCOMPLETE NUCLEAR (N=38)		COMPLETE EXTENDED (N=46)		INCOMPLETE EXTENDED (N=41)	
FAMILY DISABILITY / DEGREE INTERACTION	NO (N=88)*	YES (N=15)	NO (N=81)	YES (N=25)	NO (N=13)	YES (N=11)	NO (N=35)	YES (N=16)	NO (N=114)	YES (N=19)	NO (N=28)	YES (N=10)	NO (N=27)	YES (N=19)	NO (N=15)	YES (N=26)
	PERCENT															
LOW (1)	26	20	22	12	31	27	28.5	25	19	11	18	20	15	16	20	27
MEDIUM (2)	31	27	28	36	8	18	23	25	29	26	28	10	33	5	27	19
HIGH (3)	43	53	50	52	62	55	48.5	50	52	63	54	70	52	79	53	54
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
MEAN INTERACTION	2.17	2.33	2.27	2.40	2.31	2.27	2.20	2.25	2.32	2.53	2.36	2.50	2.37	2.63	2.33	2.27

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*Three families had no coded response to this interaction item.

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Tables 4 & 6 deleted because of illegibility

Composite family interaction. Very little differentiation seems to be the result of this variable for composite family interaction (Table 2, p. 22). The differences between the disabled and non-disabled interaction means as well as the percent in the low interaction category are very small and insignificant.

Family interaction items. The interaction mean differences are again similar with a slightly more pronounced difference for the M groups on interaction as measured by "going places together as a family" (Table 3, p. 23). The NM disabled families in each category have higher interaction means than the M disabled families, as they do in all except one case for the non-disabled families. Only two family types are differentiated by M and NM place of residence. M complete nuclear families show a negative relationship between disability and interaction while the NM ones show a positive relationship. In addition the M complete extended families show a marked positive relationship; whereas, the NM ones show a very slight positive relationship. It can be concluded then that only in the complete family categories does M-NM place of residence differentiate to any degree on the relationship between disability and interaction of this type.

When interaction is measured by "eating at least one meal a day together" (Table 4, p. 25), only the M incomplete extended families have a substantial and consistent difference between the interaction means, as well as the percentages in the low interaction category, for the disabled and the non-disabled groups. With this one exception then, there are no M-NM differentials with regard to difference between the disabled and non-disabled interaction means.

In Table 5 (p. 26) "working around the home together" is compared to disability (yes or no). The differences between the disabled and non-disabled interaction means is again similar for the M and NM groups. There are, therefore, no M-NM differentials in interaction of this type by disability.

"Relaxing around the home together" (Table 6, p. 27) shows a M-NM differential in the relationship between interaction and disability. M disabled families demonstrate a tendency to "relax around the home" more than the non-disabled; whereas, NM disabled families tend to "relax around the home" less than non-disabled families.

M-NM differentials in interaction by presence or absence of family disability are present for only two interaction items: "going places together" and "relaxing around the home together." Only complete families are differentiated by M-NM residence on "going places together," although the affect is not uniform. In general, the M families have a positive relationship between disability and "relaxing around the home together" (disabled families relaxing together more than the non-disabled) while NM families have a negative relationship. The rest of the items, as well as composite interaction, do not reflect any substantial M-NM residence differentials.

Family Type Differentials

Composite family interaction. With regard to nuclear-extended family type differentials in the difference between composite family interaction for disabled and non-disabled families (Table 2, p. 22), M extended families have larger differences between the interaction rates than nuclear families while NM nuclear families have larger differences. The affects on the relationships are not patterned. With regard to complete-incomplete family type differentials, the patterns are varied also. Maybe an examination of the interaction items will clarify this confusion.

Family interaction items. Table 3 (p. 23) shows complete families with larger differences between the interaction rates of disabled and non-disabled families than incomplete families for "going places together." Complete-incomplete as well as nuclear-extended type influences the relationship between disability and interaction of this type; however, the affects are not patterned consistently.

"How often does your family eat at least one meal a day together?" is the question asked in the second interaction item (Table 4, p. 25). The differences between the interaction rates of the disabled and non-disabled families for the different family types are similar. In the M area complete-incomplete type differentiates on the relationship between disability and interaction of this type, the complete relationships being negative and the incomplete relationships being positive. In the NM area nuclear-extended type differentiates with the nuclear relationships being positive and the extended relationships being negative. To be a disabled family is worse, in this regard, for complete M families and for extended NM families.

The relationships between disability and "working around the home together" is presented in Table 5 (p. 26). Nuclear type families have greater differences between interaction rates for disabled as compared to non-disabled families than extended type families in the M area; whereas, complete type families have greater differences than incomplete type families in the NM area. No differentiation by family type is evident for the relationships between the presence or absence of family disability and "working around the home together."

Only incomplete families have substantial differences in rates of interaction (relaxing around the home together) for disabled and non-disabled families (Table 6, p. 27). The relationships between disability and interaction of this type, however, are not differentiated by family type. Complete-extended family type, then, does differentiate on the degree of impact upon the rates of interaction for disabled and non-disabled families but does not differentiate on the relationship between disability and interaction itself.

In all cases (composite and items) family type has differentiated on the degree of difference between disabled and non-disabled family interaction rates, but in only the first interaction item did family type differentiate on the relationships between disability and interaction.

SUMMARY AND CONCLUSIONS

Family Disability and Family Interaction

No general consistent patterns of relationship between degrees of family disability and degrees of family interaction have been established for composite interaction or for any of the interaction items. It must be concluded, then, that for these families different degrees of disability have no apparent consistent patterned affect upon the degrees of family interaction. There does appear, however, to be some family interaction trends differentiated by the presence or absence of family disability.

A slight, but relatively insignificant trend was noted for composite interaction; however, it was in a direction opposite than that expected. The disabled families had slightly higher interaction rates than the non-disabled families. No significant trend was observed between "going places together" and the presence or absence of family disability. No firm trend was noted in regard to "eating at least one meal a day together" and family disability. Disabled families tend to "work around the home together" more often than non-disabled families. No general trend was observed with regard to family disability and "relaxing around the home together." It must be concluded, therefore, that no general trends exist with regard to the relationship between disability (by degree or yes-no) and interaction.

M-NM Place of Residence Differentials

Only minor differentiation was noted by M-NM residence. For complete families only, inconsistent but relatively substential M-NM differences were noted for disabled and non-disabled families on "going places together." M families showed a positive relationship between disability and "relaxing around the home together" while NM families showed a negative relationship. No M-NM differentials were observed for the other two interaction items or for composite interaction.

Some interesting differentials were observed between the M and NM families' interaction rates, disregarding disability. NM families had higher interaction rates than M families for composite interaction, as well as for three out of four of the interaction items. For the "relaxing around the home together" item, M families had higher interaction rates than NM families.

Family Type Differentials

In all except one case (eating together) family type differentiates on the degree of difference between the interaction rates of disabled and non-disabled families. On composite interaction, as well as "working around the home together" interaction, nuclear-extended family type differentiates. On "going places" and "relaxing" together, complete-incomplete family type differentiates. Contrariwise, only one case (eating together) exhibited family type differentials (nuclear-extended and complete-incomplete) in the relationship between family disability (no-yes) and interaction (composite and items). Family type, then, does differentiate on the degree of difference of interaction rates between disabled and non-disabled families but does not differentiate on the relationships between disability and interaction.

Some interesting observations were made in relation to family type differentials of interaction when disability was disregarded. Nuclear families had higher rates of composite interaction than extended families. A somewhat dubious trend showed extended as opposed to nuclear and incomplete as opposed to complete families "go places together" more often. Extended and complete families as opposed to nuclear and incomplete families tended to "eat together" less frequently. Extended and incomplete families showed a doubtful tendency to "work together" less often than nuclear and complete families. No consistent trends were observed with reference to "relaxing around the home together."

An extremely interesting observation was made on family type differentials of disability, disregarding interaction (Table 7). The percent of families disabled for the four family types shows a definitive trend.

Table 7. Percent of Families Disabled for Each Family Type by M-NM Place of Residence.

Family Type	M	NM
	----------------Percent Disabled----------------	
I. Nuclear Complete	14	14
II. Nuclear Incomplete	23	26
III. Extended Complete	46	41
IV. Extended Incomplete	31	63

Nuclear complete families are the least likely to be disabled. Nuclear families are less likely to be disabled than extended families. Complete families are less likely to be disabled than incomplete families.

No attempt will be made at this time to theorize about the findings contained herein. For the time being this will be left to the devices of the reader. Further work is now underway and shall be soon completed in the regard (Taft, 1973).

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APPENDICES

APPENDIX A: COMPARISON OF COMPLETE NUCLEAR FAMILY DISABILITY AND FAMILY INTERACTION

Table 1. Complete Nuclear Family Disability and the Question, "How often do you go places together as a family?"

Metropolitan
(N=105)

Family Disability	Degree Of Interaction: Low (1)		Medium (2)		High (3)		Total		Mean Interaction
	f	%	f	%	f	%	f	%	
None (1)	26	29	31	34	33	37	90	100.0	2.08
Low (2)	1	25	1	25	2	50	4	100.0	2.25
Medium (3)	4	50	1	12	3	38	8	100.0	1.88
High (4)	2	67	1	33	0	0	3	100.0	1.33
Mean Disability		1.45		1.18		1.21			
Nonmetropolitan (N=133)									
None (1)	34	30	46	40	34	30	114	100.0	2.00
Low (2)	1	14	2	29	4	57	7	100.0	2.43
Medium (3)	1	11	3	33	5	56	9	100.0	2.44
High (4)	0	0	2	67	1	33	3	100.0	2.33
Mean Disability		1.08		1.26		1.39			

Table 2. Complete Nuclear Family Disability and the Question, "How often does your family eat at least one meal a day together?"

Metropolitan
(N=105)

Family Disability	Degree Of Interaction: Low (1) f	%	Medium (2) f	%	High (3) f	%	Total f	%	Mean Interaction
None (1)	8	9	18	20	64	71	90	100.0	2.62
Low (2)	1	25	1	25	2	50	4	100.0	2.25
Medium (3)	0	0	2	25	6	75	8	100.0	2.75
High (4)	1	33	0	0	2	67	3	100.0	2.33
Mean Disability		1.40		1.24		1.27			

Nonmetropolitan
(N=133)

Family Disability	Low (1) f	%	Medium (2) f	%	High (3) f	%	Total f	%	Mean Interaction
None (1)	11	10	20	17	83	73	114	100.0	2.63
Low (2)	0	0	1	14	6	86	7	100.0	2.86
Medium (3)	1	11	0	0	8	89	9	100.0	2.78
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability		1.17		1.18		1.28			

Table 3. Complete Nuclear Family Disability and the Question, "How often do family members work around the home together?"

Metropolitan
(N=103)*

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)*	23	26	27	31	38	43	88	100.0	2.17
Low (2)	1	25	1	25	2	50	4	100.0	2.25
Medium (3)	2	25	2	25	4	50	8	100.0	2.25
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability		1.19		1.26		1.35			
Nonmetropolitan (N=133)									
None (1)	22	19	33	29	59	52	114	100.0	2.32
Low (2)	1	14	2	29	4	57	7	100.0	2.43
Medium (3)	0	0	3	33	6	67	9	100.0	2.67
High (4)	1	33	0	0	2	67	3	100.0	2.33
Mean Disability		1.17		1.21		1.31			

*Two families had no coded response on this question and were excluded from this table.

Table 4. Complete Nuclear Family Disability and the Question, "How often do family members relax around the home together?"

Metropolitan
(N=105)

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	8	9	14	15	67	76	90	100.0	2.63
Low (2)	0	0	1	25	3	75	4	100.0	2.75
Medium (3)	0	0	2	25	6	75	8	100.0	2.75
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability		1.00		1.44		1.27			
Nonmetropolitan (N=133)									
None (1)	12	10	26	23	76	67	114	100.0	2.56
Low (2)	0	0	1	14	6	86	7	100.0	2.86
Medium (3)	2	22	0	0	7	88	9	100.0	2.56
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability		1.29		1.14		1.29			

Table 5. Complete Nuclear Family Disability and Average Family Interaction.

Metropolitan
(N=105)

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)*		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	3	3	26	29	61	68	90	100.0	2.71
Low (2)	0	0	1	25	3	75	4	100.0	2.75
Medium (3)	0	0	1	12	7	88	8	100.0	2.88
High (4)	0	0	2	67	1	33	3	100.0	2.33
Mean Disability		1.00		1.30		1.28			
Nonmetropolitan (N=133)									
None (1)	4	3	26	23	84	74	114	100.0	2.65
Low (2)	0	0	1	14	6	86	7	100.0	2.86
Medium (3)	0	0	2	22	7	88	9	100.0	2.78
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability		1.00		1.27		1.26			

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*There were no families with an average interaction of 1.00 (no interaction); therefore, this category contains only families with an average interaction of 1.01 - 2.00.

APPENDIX B: COMPARISON OF INCOMPLETE NUCLEAR FAMILY DISABILITY AND FAMILY INTERACTION

Table 1. Incomplete Nuclear Family Disability and the Question, "How often do you go places together as a family?"

Metropolitan
(N=107)

Family Disability	Degree Of Interaction								Mean Inter-action
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	24	29	26	32	32	39	82	100	2.10
Low (2)	3	37.5	2	25	3	37.5	8	100	2.00
Medium (3)	1	14	3	43	3	43	7	100	2.29
High (4)	1	10	6	60	3	30	10	100	2.20
Mean Disability	1.28		1.70		1.44				

Nonmetropolitan
(N=38)

Family Disability	Low (1) f	Low (1) %	Medium (2) f	Medium (2) %	High (3) f	High (3) %	Total f	Total %	Mean Inter-action
None (1)	1	4	14	50	13	46	28	100	2.43
Low (2)	0	0	0	0	2	100	2	100	3.00
Medium (3)	1	25	1	25	2	50	4	100	2.25
High (4)	1	25	1	25	2	50	4	100	2.25
Mean Disability	2.67		1.31		1.63				

Table 2. Incomplete Nuclear Family Disability and the Question, "How often does your family eat at least one meal a day together?"

Metropolitan
(N=107)

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	9	11	17	21	56	68	82	100	2.57
Low (2)	2	25	1	13	5	63	8	100	2.38
Medium (3)	1	14	1	14	5	72	7	100	2.57
High (4)	0	0	1	10	9	90	10	100	2.90
Mean Disability		1.33		1.30		1.56			
Nonmetropolitan (N=38)									
None (1)	3	11	4	14	21	75	28	100	2.64
Low (2)	0	0	0	0	2	100	2	100	3.00
Medium (3)	1	25	0	0	3	75	4	100	2.5
High (4)	0	0	0	0	4	100	4	100	3.00
Mean Disability		1.50		1.00		1.67			

Table 3. Incomplete Nuclear Family Disability and the Question, "How often do family members work around the home together?"

Metropolitan
(N=106)

Family Disability	Degree Of Interaction Low (1) f	%	Medium (2) f	%	High (3) f	%	Total f	%	Mean Interaction
None (1)*	18	22	23	28	40	50	81	100	2.27
Low (2)	2	25	2	25	4	50	8	100	2.25
Medium (3)	1	14	3	43	3	43	7	100	2.29
High (4)	0	0	4	40	6	60	10	100	2.60
Mean Disability		1.19		1.63		1.53			

Nonmetropolitan
(N=38)

Family Disability	Low (1) f	%	Medium (2) f	%	High (3) f	%	Total f	%	Mean Interaction
None (1)	5	18	8	28	15	54	28	100	2.36
Low (2)	1	50	0	0	1	50	2	100	2.00
Medium (3)	0	0	0	0	4	100	4	100	3.00
High (4)	1	25	1	25	2	50	4	100	2.25
Mean Disability		1.57		1.33		1.68			

*No response for one family on this question.

Table 4. Incomplete Nuclear Family Disability and the Question, "How often do family members relax around the home together?"

Family Disability	Degree Of Interaction Low (1)		Medium (2)		High (3)		Total		Mean Interaction
	Metropolitan (N=107)								
	f	%	f	%	f	%	f	%	
None (1)	4	5	13	16	65	79	82	100	2.74
Low (2)	1	12.5	0	0	7	87.5	8	100	2.75
Medium (3)	0	0	2	29	5	71	7	100	2.71
High (4)	1	10	2	20	7	70	10	100	2.60
Mean Disability	1.67		1.59		1.45				
	Nonmetropolitan (N=38)								
None (1)	1	4	6	21	21	75	28	100	2.71
Low (2)	0	0	1	50	1	50	2	100	2.50
Medium (3)	0	0	0	0	4	100	4	100	3.00
High (4)	2	50	0	0	2	50	4	100	2.00
Mean Disability	3.00		1.14		1.54				

Table 5. Incomplete Nuclear Family Disability and Average Family Interaction.

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)*		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
Metropolitan (N=107)									
None (1)	3	4	21	25	58	71	82	100	2.67
Low (2)	1	12.5	2	25	5	62.5	8	100	2.50
Medium (3)	0	0	1	14	6	86	7	100	2.86
High (4)	0	0	0	0	10	100	10	100	3.00
Mean Disability	1.25		1.17		1.59				
Nonmetropolitan (N=38)									
None (1)	0	0	7	25	21	75	28	100	2.75
Low (2)	0	0	0	0	2	100	2	100	3.00
Medium (3)	0	0	0	0	4	100	4	100	3.00
High (4)	0	0	1	25	3	75	4	100	2.75
Mean Disability	0.00		1.38		1.63				

*There were no families with an average interaction of 1.00 (no interaction); therefore, this category contains only families with an average interaction of 1.01 - 2.00.

APPENDIX C: COMPARISON OF COMPLETE EXTENDED FAMILY DISABILITY AND FAMILY INTERACTION

Table 1. Complete Extended Family Disability and the Question, "How often do you go places together as a family?"

Metropolitan
(N=24)

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	6	46	5	39	2	15	13	100.0	1.69
Low (2)	0	0	1	33	2	67	3	100.0	2.67
Medium (3)	1	20	3	60	1	20	5	100.0	2.00
High (4)	1	33	2	67	0	0	3	100.0	1.67
Mean Disability		1.63		2.18		1.80			

Nonmetropolitan
(N=46)

Family Disability	Low (1) f	Low (1) %	Medium (2) f	Medium (2) %	High (3) f	High (3) %	Total f	Total %	Mean Interaction
None (1)	8	30	8	30	11	40	27	100.0	2.11
Low (2)	1	17	4	66	1	17	6	100.0	2.00
Medium (3)	2	25	2	25	4	50	8	100.0	2.25
High (4)	[illegible]	20	3	60	1	20	5	100.0	2.00
Mean Disability		1.67		2.00		1.71			

Table 2. Complete Extended Family Disability and the Question, "How often does your family eat at least one meal a day together?"

Metropolitan
(N=24)

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	1	8	4	31	8	61	13	100.0	2.54
Low (2)	1	33	0	0	2	67	3	100.0	2.33
Medium (3)	1	20	1	20	3	60	5	100.0	2.40
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability		2.00		1.83		1.93			
Nonmetropolitan (N=46)									
None (1)	4	15	3	11	20	74	27	100.0	2.59
Low (2)	0	0	2	33	4	67	6	100.0	2.67
Medium (3)	0	0	2	25	6	75	8	100.0	2.75
High (4)	0	0	5	100	0	0	5	100.0	2.00
Mean Disability		1.00		2.75		1.53			

Table 3. Complete Extended Family Disability and the Question, "How often do family members work around the home together?"

Metropolitan
(N=24)

Family Disability	Degree Of Interaction								Mean Inter-
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	4	31	1	8	8	62	13	100.0	2.31
Low (2)	1	33	0	0	2	67	3	100.0	2.33
Medium (3)	2	40	1	20	2	40	5	100.0	2.00
High (4)	0	0	1	33	2	67	3	100.0	2.67
Mean Disability	1.71		2.67		1.86				
Nonmetropolitan (N=46)									
None (1)	4	15	9	33	14	52	27	100.0	2.37
Low (2)	1	17	0	0	5	83	6	100.0	2.67
Medium (3)	2	25	0	0	6	75	8	100.0	2.50
High (4)	0	0	1	20	4	80	5	100.0	2.80
Mean Disability	1.71		1.30		2.00				

Table 4. Complete Extended Family Disability and the Question, "How often do family members relax around the home together?"

Metropolitan
(N=24)

Family Disability	Degree Of Interaction								Mean Inter-
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	1	8	2	15	10	77	13	100.0	2.69
Low (2)	0	0	1	33	2	67	3	100.0	2.67
Medium (3)	0	0	2	40	3	60	5	100.0	2.60
High (4)	0	0	0	0	3	100	3	100.0	3.00
Mean Disability	1.00		2.00		1.94				

Nonmetropolitan
(N=46)

Family Disability	Low (1) f	Low (1) %	Medium (2) f	Medium (2) %	High (3) f	High (3) %	Total f	Total %	Mean Inter-
None (1)	1	4	8	29	18	67	27	100.0	2.63
Low (2)	1	17	1	17	4	66	6	100.0	2.50
Medium (3)	1	12.5	1	12.5	6	75	8	100.0	2.63
High (4)	1	20	0	0	4	80	5	100.0	2.60
Mean Disability	2.5		1.3		1.88				

Table 5. Complete Extended Family Disability and Average Family Interaction.

Metropolitan
(N=24)

Family Disability	Degree Of Interaction								Mean Interaction
	Low (1)*		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
None (1)	0	0	3	23	10	77	13	100.0	2.77
Low (2)	0	0	1	33	2	67	3	100.0	2.67
Medium (3)	1	20	1	20	3	60	5	100.0	2.40
High (4)	0	0	0	0	3	100	3	100.0	3.00
Mean Disability	3.00		1.60		1.94				
Nonmetropolitan (N=46)									
None (1)	1	4	5	18	21	78	27	100.0	2.74
Low (2)	0	0	1	17	5	83	6	100.0	2.83
Medium (3)	0	0	2	25	6	75	8	100.0	2.75
High (4)	1	20	0	0	4	80	5	100.0	2.60
Mean Disability	2.5		1.63		1.81				

*There were no families with an average interaction of 1.00 (no interaction); therefore, this category contains only families with an average interaction of 1.01 - 2.00.

APPENDIX D: COMPARISON OF INCOMPLETE EXTENDED FAMILY DISABILITY AND FAMILY INTERACTION

Table 1. Incomplete Extended Family Disability and the Question, "How often do you go places together as a family?"

Family Disability	Degree Of Interaction								
	Low (1)		Medium (2)		High (3)		Total		Mean Interaction
	f	%	f	%	f	%	f	%	
Metropolitan (N=51)									
None (1)	9	26	12	34	14	40	35	100	2.14
Low (2)	1	33	2	67	0	0	3	100	1.67
Medium (3)	1	25	0	0	3	75	4	100	2.50
High (4)	4	44.5	1	11	4	44.5	9	100	2.00
Mean Disability	2.00		1.33		1.86				
Nonmetropolitan (N=41)									
None (1)	3	20	5	33	7	47	15	100	2.27
Low (2)	2	50	2	50	0	0	4	100	1.50
Medium (3)	3	37.5	2	25	3	37.5	8	100	2.00
High (4)	0	0	7	50	7	50	14	100	2.50
Mean Disability	2.00		2.69		2.59				

Table 2. Incomplete Extended Family Disability and the Question, "How often does your family eat at least one meal a day together?"

Family Disability	Degree Of Interaction								Mean Inter-
	Low (1)		Medium (2)		High (3)		Total		
	f	%	f	%	f	%	f	%	
Metropolitan (N=51)									
None (1)	6	17	7	20	22	63	35	100	2.46
Low (2)	0	0	0	0	3	100	3	100	3.00
Medium (3)	0	0	1	25	3	75	4	100	2.75
High (4)	0	0	1	11	8	89	9	100	2.89
Mean Disability		1.00		1.56		1.92			
Nonmetropolitan (N=41)									
None (1)	1	7	1	7	13	86	15	100	2.80
Low (2)	1	25	1	25	2	50	4	100	2.25
Medium (3)	0	0	2	25	6	75	8	100	2.75
High (4)	1	7	3	21.5	10	71.5	14	100	2.64
Mean Disability		2.33		3.00		2.42			

Table 3. Incomplete Extended Family Disability and the Question, "How often do family members work around the home together?"

Metropolitan
(N=51)

Family Disability	Degree Of Interaction						Total		Mean Interaction
	Low (1)		Medium (2)		High (3)				
	f	%	f	%	f	%	f	%	
None (1)	10	28.5	8	23	17	48.5	35	100	2.20
Low (2)	0	0	1	33	2	67	3	100	2.67
Medium (3)	0	0	1	25	3	75	4	100	2.75
High (4)	4	45	2	22	3	33	9	100	1.89
Mean Disability	1.86		1.75		1.68				
Nonmetropolitan (N=41)									
None (1)	3	20	4	27	8	53	15	100	2.33
Low (2)	0	0	2	50	2	50	4	100	2.50
Medium (3)	4	50	2	25	2	25	8	100	1.75
High (4)	3	21.5	1	7	10	71.5	14	100	2.50
Mean Disability	2.70		2.00		2.64				

Table 4. Incomplete Extended Family Disability and the Question, "How often do family members relax around the home together?"

Metropolitan
(N=51)

Family Disability	Degree Of Interaction						Total		Mean Interaction
	Low (1)		Medium (2)		High (3)				
	f	%	f	%	f	%	f	%	
None (1)	5	14	4	12	26	74	35	100	2.60
Low (2)	0	0	0	0	3	100	3	100	3.00
Medium (3)	0	0	1	25	3	75	4	100	2.75
High (4)	0	0	1	11	8	89	9	100	2.89
Mean Disability	1.00		1.83		1.83				
Nonmetropolitan (N=41)									
None (1)	1	7	3	20	11	73	15	100	2.67
Low (2)	1	25	0	0	3	75	4	100	1.75
Medium (3)	2	25	2	25	4	50	8	100	2.25
High (4)	2	14	3	22	9	64	14	100	2.50
Mean Disability	2.83		2.63		2.41				

Table 5. Incomplete Extended Family Disability and Average Family Interaction.

Family Disability	Degree Of Interaction						Total		Mean Interaction
	Low (1)*		Medium (2)		High (3)				
	f	%	f	%	f	%	f	%	
				Metropolitan (N=51)					
None (1)	3	8	9	26	23	66	35	100	2.57
Low (2)	0	0	0	0	3	100	3	100	3.00
Medium (3)	0	0	1	25	3	75	4	100	2.75
High (4)	0	0	4	44	5	56	9	100	2.56
Mean Disability	1.00		2.00		1.70				
				Nonmetropolitan (N=41)					
None (1)	1	7	4	27	10	66	15	100	2.60
Low (2)	0	0	2	50	2	50	4	100	2.50
Medium (3)	1	12.5	3	38.5	4	50	8	100	2.38
High (4)	0	0	2	14	12	86	14	100	2.86
Mean Disability	2.00		2.27		2.64				

*There were no families with an average interaction of 1.00 (no interaction); therefore, this category contains only families with an average interaction of 1.01 - 2.00.

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THE PERCEPTION OF COMMUNITY POWER IN TWO RURAL LOUISIANA COMMUNITIES

by

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Introduction

The study reported here focused on the perception which rank-and-file members of a community have of its power structure. Much research has been conducted on the upper echelons of the power continuum, that is, those power actors who comprise control groups within the community; however, studies by Lynd and Lynd (1929 & 1937), West (1945), Warner (1941), Hunter (1953), Vidich and Bensman (1960), Dahl (1961), and others have ignored rank-and-file members' perception of the community power structure or paid it little more than casual attention. Presthus (1963), Jenkins (1966), and O'Carroll (1971) are exceptions in that all have examined the relationships of rank-and-file members perception to that of the elites.

The social dimension of power may be recognized at the community level; for the power is in large measure a result of the individual's capacity to manipulate this larger system of which he is a part. Power is created and generated within the context of social interaction and human relationships. The community is, in a sense, the meeting place of the individual and the larger society and culture. It is here, in his own

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locality setting, that the individual confronts his society's institutions, its manner of religious and economic expression, its modes of regulating behavior, etc.. It is also within this community context that ongoing systems of power relationships are realized.

Perception of community power serves as one indicator of the community's ability to respond insofar as it indicates the ties between the rank-and-file and their leaders, and the homogeneity of attitude among the rank-and-file.

This research was designed to specifically investigate the relationship of power perception to the socio-cultural variables of locality, race, age, education and income.

Methodology

Sample

Two hundred forty-three male heads of households were interviewed from a systematic random sample of households in two Louisiana communities. The two study communities were selected by judgment as representative of Anglo-Protestant North Louisiana and French-Catholic South Louisiana sub-cultures, respectively. The populations of the two communities were as nearly equal as could be obtained.

Anglo-Protestant town serves as a market for farm products, provides professional services, banking facilities, supplies major production goods needed by the farm industry, and offers the necessities and conveniences of life for a major portion of the parish's population. Anglo-Protestant town had 6,432 residents in 1970, an increase of 593 over the 1960 figure of 5,839 persons; 52% white and 48% black.

French-Catholic town is located in an overwhelmingly agricultural parish; crops include sugar cane, corn, and rice. The land surrounding French-Catholic town is in the heart of Louisiana's "sugar bowl". In 1970, the population of the French-Catholic town was 4,942, an increase of 49.6% over the 1960 figure of 3,303 persons; 71% white and 29% black.

Determination of Power Knowledge Score

The reputational approach which essentially consists of asking respondents who they perceive as influential or powerful people in their community was used to identify power actors. This approach stems from Hunter's now classic study of community power in "Regional City". The dependent variable, the power knowledge score, was conceptualized as the degree to which an individual's perception of which community members are powerful, coincides with the perception of the power structure held by the more informed sector of the public.

In each town, a panel of six community knowledgeables or judges were asked who they perceived as powerful or influential in their community in terms of bringing about action they desired or in terms of preventing action they did not support. These community knowledgeables represented the various institutional sectors and issue areas in their home communities and they were judgmentally chosen by the researcher for their knowledge of and affiliation with community affairs.

In the French-Catholic community, the panel of knowledgeables included a bank executive, a state representative, the agriculture cooperative extension agent, a city councilman, the cooperative extension home economist and a businessman. The knowledgeables selected in the Anglo-Protentant community included the mayor and banker, the policy jury president, a former state senator, the agricultural cooperative extension agent, the sheriff and the cooperative extension service home economist.

For analytical purposes, the power actors pool was delimited to ten persons in the French-Catholic community and to nine in the Anglo-Protestant community. Influentials eliminated by this procedure were mentioned by only one knowledgeable so that those retained in the pool were more representative of the collective thinking of the panel of knowledgeables than were those who were eliminated.

The power actors listed by the knowledgeables were assigned weighted scores by the following procedure:

1. The number of times a power actor was mentioned by the six knowledgeables was totaled.
2. The total scores of all power actors in a given community were summed.
3. The percentage of the community total an individual received was used as his power score.

For example, a power actor who was mentioned by five knowledgeables in a community with 36 as the total score of all power actors listed would receive a score of 5/36 or 13.9

and a respondent who was mentioned twice would receive a score of 5.6.

Power actor knowledge scores for rank-and-file respondents were determined by summing the scores of the power actors he listed. If a respondent listed all the names in the power actor pool designated by the knowledgeables, his score would be 100. If he mentioned none, his score would be zero. The sample range was 0-62.9.

Analysis of Data

The power knowledge scores were subjected to least squares analysis of variance by the following independent variables: locality, race, age, education, income, town by race, and age by race. Interval level data were used for the education and income variables. Age data was divided into three categories: 17-39; 40-59; and 60 and over.

Results and Discussion

Power Actor Pool

Occupational positions of the designated power actors in each community are shown in Tables I and II with the number of times each was mentioned by knowledgeables and rank-and-file respondents.

As can be seen from Table I, six of the nine influentials identified in the Anglo-Protestant community were from the business sector. The sheriff and the registrar of voters were representative of the governmental sector and a white protestant minister represented the religious sector.

The majority of the power actors were found to be active outside their institutional sector and issue areas. In other words, power leaders were influential across the board. The Anglo-Protestant community power structure could be labeled as monomorphic, because no factions were apparent among the power group.

The sector representativeness from the French-Catholic community was almost identical to that of the Anglo-Protestant community in that five members were business leaders, three were government representatives and one was from the religious sector. An additional category, cultural, was represented by one man.

TABLE I. Occupational Positions of Power Actors in Anglo-Saxon Community and the Number of Times Mentioned by Knowledgeables and Rank-and-File Respondents

Position	No. of Times Mentioned by Rank-and-File	No. of Times Mentioned by Knowledgeables
Mayor and President of Local Bank	46	6
Realtor & Former State Representative	38	3
Oil Speculator & Land Developer	31	5
Owner, Motor Co. & Bank Executive	29	3
Owner, Sawmill Enterprise & Liquor Store	29	6
Sheriff	16	6
Pastor	13	4
President of C. of C. & Registrar of Voters	10	2
Funeral Home Director*	10	1

*Denotes Black Leaders

TABLE II. Occupational Positions of Power Actors in French-Catholic Community and the Number of Times Mentioned by Knowledgeables and Rank-and-File Respondents

Position	No. of Times Mentioned by Rank-and-File	No. of Times Mentioned by Knowledgeables
Mayor & Owner of Hardware Enterprise	59	6
Bank President & Former State Representative	40	6
Present State Representative	29	6
Owner, Motor Company	14	5
Bank President	13	6
Police Jury Member & Gas Distributor	6	6
Local Furniture Store Owner	7	2
Pastor	6	4
Chief of Police	5	4
President of Acadian Festival	5	1

TABLE III

PERCENT OF HOMEMAKERS IN TWO LOUISIANA COMMUNITIES WHO LISTED CERTAIN FOOD ITEMS AS FOODS THEY WOULD SERVE TO IMPRESS SOMEONE

Category	% of Total Sample	Category	% of Total Sample
Steak	25.5	Crayfish	11.1
Miscellaneous Vegetables	23.6	Pork Roast and Ham	10.8
Salad	22.7	Miscellaneous	9.1
Beef Roast	22.4	Breads	6.9
Chicken	20.5	Seafood and Fish	6.1
Potatoes	19.1	Barbeque	4.4
Rice	16.9	Macaroni & Spaghetti	3.3
Sweets	12.7	Soups	2.2

One major difference existed between the two communities: the rank-and-file respondents from the French-Catholic community claimed there were two almost equal sections of power active in the community. Therefore, the power structure of the French-Catholic community was labeled polymorphic.

Rank-and-File Power Perception Scores

Results of least squares analysis of variance for the dependent variable, power perception, are shown in Table III.

Table III. Results of Least Squares Analysis of Variance of Power Perception Scores of Rank-and-File Males in Two Louisiana Communities

Source	DF	Sums of Squares	F Value	Prob. F
Total	240	6917873.4		
Town	1	1606.9	0.0576	0.8058
Race	1	236643.0	8.4823	0.0042
Age	2	92597.6	1.6596	0.1905
Town x Race	1	24963.7	0.89481	0.6527
Race x Age	2	13088.8	0.23458	0.7940
Education	1	10743.7	0.38510	0.5427
Income	1	9199.6	0.32975	0.5735
Error	231	6444521.0		

Of all the independent variables included in the analysis, statistically significant differences were found only by race. The adjusted mean score of the white respondents was 21.7 while the adjusted mean score of the black respondents was 13.5 The race difference was significant at the .01 level of probability. Although the age differences were not significant, it is interesting to note the power perception scores tended to decrease for increased age levels.

It is the judgment of the researcher that the differential in power for whites and blacks arises from a variable pattern of social relations for the two racial groups. Up to the present, the Negro has remained mostly socially and morally isolated from the larger community in which he lives. Negro class structure, associations, and institutions have emerged in response to segregation, and represent an adjustment to the isolation under which Negroes have lived.

This situation is especially characteristic of social and racial relations in both communities studied. Racial relations indicate a tendency toward subordination on the part of the Negro. Despite outward signs of desegregation, and these are only minimal, blacks in both study communities were only distantly related to community activities.

Blacks tended to name individuals who may be influential within the black community, but are only peripheral to the larger community power structure. These black leaders are in large part mere figureheads, as they possess no real power beyond the subcommunity level. Even that power is somewhat limited. As one astute black respondent noted, "Some of the black leaders can help bring about action, but none of them can prevent action".

G. Franklin Edwards (Heller, 1969:388) has observed:

> The segregation of Negroes from the mainstream of American life has produced institutional patterns and behavior which have a bearing upon contemporary efforts to eliminate inequalities between the two major racial groups. The behaviors are expressed as deviations of Negroes from many normative patterns of American life and suggest something of the magnitude of the differentials which must be dealt with if reconciliation, rather than further alienation, is to be achieved.

It is therefore necessary that we recognize the significance of race on perception of power in the community, as well as in other areas of social life.

It might be expected that those who were more educated and who had higher incomes would be more aware of the power structure than those with less education and income. However, it should be remembered that the two study communities are small towns where nearly everyone knows everyone else. Status and knowledge of community affairs may be more dependent on the personality and daily contacts of the individual than on more objective criteria, such as income and education. For example, a grocery clerk may talk with more people about community affairs in his work day and be better known by others than will a school teacher.

Consideration should also be given to the idea that those in lower status positions feel that they are at the mercy of others more than do those with greater status. This viewpoint was substantiated somewhat by comments of the respondents. Some of the upper status level respondents were somewhat reluctant to acknowledge power actors, possibly because they are too close to the source of power themselves or possibly because they feel autonomous to the power actors.

The reasons for finding no differences between education and income levels are undoubtedly questions with complex answers that need further study. Certainly, perception of community power is related to an individual's concept of his ability to manipulate his own future.

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EFFECTIVE CITIZEN PARTICIPATION IN COMMUNITY DECISION MAKING

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INTRODUCTION

The development of a community depends to a large extent on the ingenuity and ability of its local leadership. Leaders can be effectively involved in the decision-making process to bring about desired social change and thereby meet the needs and aspirations of the citizens and their communities. This is usually accomplished through groups and organizations working cooperatively.

To solve community problems, we must have several ingredients. First, we must have community leadership. This includes people who are identified as being influential leaders in the community, as well as capable people who can be developed into leaders. Second, we must have real problems as identified by citizens to deal with. These are sometimes the things that bother the people in the community and sometimes the problems are deeper than that.

A problem identification survey can be used to determine the influential people as well as the problems of a community. This process not only identifies the parish (county) and community leaders, but also provides a method of involving people who, because of their position or wide range of community activities, are likely to know a great deal about their community. The survey is an attempt to see the community through the eyes of leaders from the various sectors of community life.

The view of the area through the eyes of a representative cross-section of leaders cannot be considered a complete view of the community. For example, it reflects the views and problems of the lower socioeconomic groups only to the degree that leaders who represent these people can and will communicate their views.

The interview process helps the parish leaders to focus their thoughts on parish problems. The survey also thrusts the parish Rural Development Committee and the Extension staff into the middle of local concerns and problems.

There are common concerns throughout most communities. However, no community can borrow a problem-solving technique from another. The leaders of each community must define their own problems and initiate programs to meet their own unique needs.

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During the survey, the interviewer asks each parish leader to list the problems of his parish as he sees them. In effect, the survey itself helps create a desire among many of the community leaders to do something about the problems of the parish. The survey provides the incentive for the community leaders to organize community concerns in their own minds. The resulting list of concerns then needs to be separated into small manageable projects which can be grappled with one by one.

This report describes the method used to involve citizens in the decision-making process and some of the results.

SURVEY METHODOLOGY

Parish Rural Development Committee

Most parish rural development committees are composed primarily of the U. S. Department of Agriculture representatives who are Cooperative Extension Service, Soil Conservation Service, Farmers Home Administration, Agricultural Stabilization and Conservation Service, and the National Forest Service. Other organizations and agencies such as the Health Department, Welfare Department, Office of Economic Opportunity, and concerned citizens representing various segments of the social strata are also involved in some cases.

Many rural development committees were at a loss as to exactly how to get started in Rural Development. As a result of this need, a step by step procedure for effective citizen participation to identify problems, establish a priority of problems, select alternative solutions, play for action, and implement a plan of action were developed for these committees.

The parish rural development committee discusses the possibility of conducting a problem identification survey as a means of finding out what the needs and problems of the parish are as seen through the eyes of the citizens. A survey also provides a method of determining who the influentials in the parish are.

If the committee decides to pursue the matter further, they decide on a time when they can meet with a member of the resource development task force to make definite plans.

Task Force on Resource Development

A Task Force on Resource Development has been organized in the state office of the Cooperative Extension Service. On the Task Force are two Agricultural Economists, one Resource Development specialist, a Recreation specialist, and a Rural Sociologist.

A member of the Task Force will serve as coordinator for the parish problem identification survey. He will meet with the parish rural development committee to explain the process and then decide on details of the survey. It is possible for any member of the Task Force to replace a coordinator at any given point in the process due to a handbook which lists the steps in chronological order.

Participant Observers

A participant observer will go with each member of the rural development committee to form a team to do the interviewing. The participant observer may be a representative of state or area agencies and organizations, members of the Extension staff, or faculty of the universities and colleges interested in community development work.

The head of each USDA agency is requested to submit names of people on his staff who would be able to assist as a participant observer. Local colleges or universities are invited to take part in the problem identification survey acting as a participant observer.

The coordinator informs the Cooperative Extension Service state office personnel as well as members of the academic staff who might be interested in participating in the survey.

The participant observer may spend a day or the entire week working on the survey.

Panel of Judges

The USDA members of the Parish Rural Development Committee prepare a list of 15-20 names of people who they consider to be the top individuals in the parish, including men, women, black, and white. This should be an independent effort with no consultation between members. Other members of the Extension staff, especially the Home Demonstration Agents, are asked to submit a list of names.

Four outside people are selected to make lists also. These people are informed that the Rural Development Committee in cooperation with Louisiana State University is going to conduct a problem identification survey, and we would like to have a list of 15-20 names of people whose good judgement they respect, and who are concerned and knowledgeable about the problems of the parish. These four people should include two white males (one of whom should be under 35 years of age), one black male, and one female. These could be couples if the committee so desires.

Cards

For each name submitted a card is typed with pertinent information such as name, address, zip code, and telephone number. Additional information such as Police Jury member, public official, race, etc., may be coded on the cards if so desired.

The second and subsequent times a name is mentioned, a mark will be placed on the card. For each card with at least one mark, or names that have been mentioned two or more times, a duplicate card will be made giving only information necessary to locate the person.

A list of Police Jury members (governing body), school board members, mayors, sheriff, assessor, and other important elected officials is compiled and checked against the cards. A card is made for any name not in the file. Duplicated cards will also be made. A courtesy interview will be made for these people if their name has not come up two or more times.

One week prior to the survey, duplicate cards will be reviewed and divided among the Rural Development Committee to make appointments for the first day of interviewing.

Week of the Survey

Monday - The coordinator will conduct an orientation meeting for members of the Rural Development Committee, the Extension staff, and any participant observers able to attend. The background of the survey is explained as well as the role of the interviewer and the participant observer.

Tuesday - A member of the Rural Development Committee and a participant observer form a team to conduct interviews scheduled by the Rural Development Committee member.

The rural development committee member takes the lead in the interview. The interviewer should read the questions from a card to insure the integrity of the survey. The first question is: "Will you indicate some problems or concerns as you see them of ______________ Parish." The participant observer should write the answers on a card.

The interviewer then asks: "Please give us names of individuals whose good judgment you respect and who are concerned about the community." They are informed that we would like to have the names of men and women, black and white. The word "leader" is not mentioned during the interview.

The person interviewed is informed that the findings will be compiled and copies will be available at the Town Hall meeting.

Cards are returned to the secretary and additional names of leaders checked and marks put on the cards for those previously listed. A card is written for any new names.

Wednesday - Those people mentioned three or more times have not been interviewed should be assigned to team members to try to interview.

Thursday - The coordinator and the parish chairman meet to analyze the progress to date. Any areas of the parish not covered either by geographic or interest area should be covered with a courtesy survey. Those people mentioned four or more times that have not been interviewed should be assigned to a team member to make appointments for Friday morning. Generally, this is an open day to allow members to keep other programs going.

Friday - Teams will keep appointments previously made and any other new names will try to be contacted.

If at all possible, all interviews should be completed within the week.

Summary and Analysis

Problems and concerns that have been listed by the people should be organized into broad categories such as:

- AGRICULTURE
- ECONOMICS AND EMPLOYMENT (BUSINESS, INDUSTRY, EMPLOYMENT)
- EDUCATION (GENERAL, VOCATIONAL, ADULT)
- ENVIRONMENT (POLLUTION AND BEAUTIFICATION)
- GOVERNMENT (ORGANIZATION, LAW ENFORCEMENT, TAXES)
- HEALTH AND WELFARE
- MOTIVATION AND LEADERSHIP
- PUBLIC FACILITIES (WATER, SEWER, TRANSPORATION, WASTE)
- PUBLIC POLICY
- RECREATION
- SOCIAL AND SPIRITUAL (RACE RELATIONS)

The coordinator compiles and analyzes the results and prepares a summary of the findings.

TOWN HALL MEETING

Total Community Planning or Specialized Planning?

At the planning level, broad planning by expert planners or a team of planners, appears logical and not too difficult. However, due to the nature of social change, broad action programs involving lay participation are much more difficult. The evidence seems to indicate that significant community change typically takes place as rather narrow, specialized projects. For example, a committee organized for the development of industry. Its "oneness" of purpose can serve as a spearhead for very rapid industrial growth. Although less imbalance would likely occur if a broad, many fronted action program could be carried on, there are reasons why the more segmented approach usually occurs. *First*, any community is limited in its resources, time, and energies available at any one time. *Second*, people tend to be concerned more about specific problems rather than improving on a broad front. *Third*, the broad approach involves so many complexities that it is difficult for laymen to comprehend without considerable study. It is, indeed, difficult to run hard in one direction as one simultaneously runs in several other directions.

The Establishment of Priorities and A Plan of Action

If action is the ultimate goal of a community study-planning program, the process should go beyond the study-recommendation stage. This principle was brought out in a study of the results of 500 community surveys. This study indicates that there are three conditions usually associated with studies which only "catch dust." First, the ineffective studies usually involved a high proportion of professionals and few permanent lay citizens. On visiting these communities, a large proportion of these highly mobile professionals had gone on to other pastures. Second, most of the ineffective studies only listed conditions, needs and recommendations. They did not develop a priority of goals or objectives, nor did they lead other groups such as lay advisory groups to do so. Third, these studies seldom involved the all-important step of developing a plan of action for carrying out the goals decided upon.

The finding of this "study of studies" and other evidence leads to this conclusion: if any type of community survey is worth doing at all, it should involve (1) the participation of lay citizens, (2) the establishment of a priority of goals based upon relative importance and logical sequence, and (3) a plan of action to implement the goals.

The Meeting

The date for this meeting was agreed upon prior to the survey; and when the people were interviewed they were informed. In addition, a letter is mailed to every person interviewed encouraging them to attend this meeting.

The chairman of the rural development committee opens the meeting and gives a brief history of rural development in the parish.

The coordinator then presents the results of the survey.

A motivational talk is given on "Where Do We Go From Here?" outlining the process.

Discussion groups are utilized to involve citizens in discussing and determining a priority of the problems. They select their own spokesman. They are asked to select the two or three problems they think, they as a citizen group, can do something about within a reasonable length of time.

After they have arranged that priority, it is suggested if they want to do more, they need to have a meeting at which authorities on the top two problems can discuss alternatives. A time and place is decided by the citizens for the next meeting.

ORGANIZING FOR ACTION

Introduction

Up to this point, recognition and definition of problems, establishment of a priority of problems and motivation to act, will have involved only a small number of people. Now an effort should be made to broaden the base of involvement. If other individuals and organizations are to support the cause, they must have the opportunity to become informed and convinced.

After the priority of problems has been established, the next step is to select an organization to study and plan. There are three basic approaches. One is to hire an agency or commercial firm to make a study and make recommendations. Two is to assign the task to an existing community organization; or three, create a new organization specifically for this problem. Combinations of these methods may be feasible.

If action is the ultimate goal of the problem identification survey, the first approach listed is not likely to be very effective. The significance of incorporating community leaders and other lay citizens into the study planning process has been stated this way: "Probably due, in part, to our particular form of government in the United States, lay advisory groups to support official agencies have come into wide-spread use. These devices are reported to serve varying functions such as: (1) a way of getting the layman's point of view structured into official plans, (2) a sounding board by which public officials may test out plans developed by technical specialists, (3) a way of educating the public and gaining public support, (4) a way of gaining access to certain professional and technical abilities not otherwise available, and (5) a means of getting coordination between loosely structured political factions or other basic divisions within the community."

The Cooperative Extension Service, as well as all USDA agencies, has long made use of lay citizens' advisory committees to assist them in planning programs.

If an established community organization can assume the basic sponsorship while inviting representation or co-sponsorship from other organizations, agencies and groups, the chances for success are greater. This method has the advantage of maintaining communication through volunteer help. There is no need for the parish rural development committee to try to organize a committee to work in competition with an existing organized group. It would be a better use of manpower if the efforts were combined.

A citizens' sub-committee should be formed to further study each top priority problem. These committees will need someone to call meetings, and keep a record of important points; but there is no need for a formal organization. As they progress, they may need more information, other resource people and an opportunity to report their progress and needs at a town hall meeting of the entire group.

Planning

The coordinator, the chairman, rural development committee members and spokesmen for discussion groups discuss and select resource people to discuss the two top problems selected at the town hall meeting. These resource people may be local people with a greater insight into the problem, someone from a state agency or organization, or from a university. The important thing is obtaining someone who is knowledgeable about the subject, and who will be able to present alternative means of solution, as well as the consequences associated with each alternative.

We realize that we cannot bypass the existing power structure. However, politicians realize that if they wish to remain in office, they must satisfy most of the citizens. In most cases, the elected officials have realized the worth of such a study and have cooperated.

We will check with the Superintendent of Education first if we are working on a problem in education, with the Police Jury for solid waste, etc. In most cases, they know there is a problem and are happy that the citizens are aware of it and willing to help work to solve it.

The Meeting

The chairman introduces other members of the parish rural development committee. If there are many people who have not been at the Town Hall meeting, he may wish to explain some of the background for the rural development work in the parish.

The results of the survey are briefly reviewed. The top ten problems as determined by the survey, as well as the top three or four problems singled out at the Town Hall meeting are emphasized.

The participants need to know more about the entire process and what the rural development committee has in mind. A talk on "game plan" describes in brief detail, the rural development process and the steps as visualized by the rural development committee.

Each resource person discusses some of the alternate solutions to that particular problem and the advantages and disadvantages of each. Time is allowed for questions from the audience.

The audience is divided into two problem area discussion groups. They are asked to go to the group in which they are most interested.

A member of the rural development committee is the group discussion leader. He will have been previously oriented as to the objectives and goals for this discussion period. The resource person also meets with the group to discuss the problem more in detail, and answer questions.

The main purpose of the group discussion is to decide if they wish to continue working on the problem, not on how to solve the problem. They need more information and time before they make the final decision as to which is the best way to handle the problems.

After they decide to continue working on the problem, they select a chairman and a secretary, so they will have someone to call the next meeting of the action committee, as well as someone to keep a record of important points. These people should be citizens and not USDA representatives.

The time and place of the next meeting of this action committee is decided upon.

The meeting reconvenes and each group has their newly elected chairman report on what the group has decided, including the time and place of the next meeting. The chairman of the parish rural development committee assigns one member of the committee to be a liaison person for the citizens' group and work closely with them.

The chairman explains that at some future date, there will be another Town Hall meeting, at which time a new problem will be inserted into the process. He also points out that although committees had only been established for two problems, if some group wants to work on some smaller community problem, the parish rural development committee will be glad to assist them in any way. This type of action is encouraged.

STUDY ACTION COMMITTEE

Introduction

If community services and development are going to be relevent and coordinated with the people of the community, they must be related to them through some form of a citizens committee or committees. Processes must be developed so that citizens in communities, whether they be a growth center, parish or smaller area, exercise more power of coordination and direction.

In every community, decisions are being made each day. There are people in every community who are making decisions for that community or chosing not to make decisions regardless of whether we have a development program going or not, or whether we think highly of the quality of the decisions being made. The function of the rural development process is to tie into this operation and coordinate, speed up, and improve the quality of the decisions being made.

If better coordination of the community goals and services are to be obtained, the citizens of influence or the natural leaders must be brought together for the same vigorous study and analysis that they use in their businesses and professions. They likewise must be serviced by the best knowledge that is available concerning community problems.

The process has moved from the Task Force at the state level to the parish Rural Development Committee and now to a citizens' study action committee. A USDA representative works with the committee, but it is the citizens who make the decisions.

Citizen Decision Making

The study action committees meet as soon as possible after the parish-wide meeting to discuss and plan how they are going to get some action in regard to their problem. This is where the work is done.

The chairman is free to call upon the parish rural development committee for suggestions as well as assistance in obtaining more information upon which to base their decisions. The chairman calls the meetings. The secretary of the committee keeps a set of notes so they will have a record of decisions made and actions taken. The secretary also keeps a list of members of the committee.

The rural development committee may assist the chairman and secretary by preparing notices of meetings and providing information and assistance asked for. At least one member of the rural development committee tries to meet with the study action group in order to keep abreast of the progress and keep the rural development committee informed.

Study action groups meet as often as necessary to study, plan and then implement the plan. When more help is needed, they contact the rural development committee so they can set another Town Hall meeting.

These committees may decide to visit other areas where they have solved similar problems. They may invite resource people to give them more information and discuss possible alternatives.

They continue meeting until they have achieved their goal or decide that they cannot accomplish it. Sometimes they have to settle for a partial solution. They report at a Town Hall meeting and then the committee is dissolved.

COMMUNITY PROBLEMS

In addition to the problems of community-wide concern, the parish rural development committee encourages the organization of committees to work on smaller problems of community concern.

If a community or a small group of citizens has a problem that they think the rural development committee could be of assistance with, they organize their committee, selecting a chairman and a secretary just as the other committees. The chairman informs the rural development committee of the existence of the committee and then ask for assistance.

The rural development committee may call upon the task force for assistance with these community problems. Again, a member of the rural development committee is assigned to work with the committee.

The same process is followed with community problems as with the parish problems - that is to get more information, study the alternatives, and then decide on a course of action. The community committee should develop a written plan of action if they hope to succeed in achieving results.

In some communities, committees are already active. The rural development committee should approach them to make their services available. Community committees are encouraged to report at the Town Hall type meeting so that everyone may be informed of progress being made in the parish.

FUTURE TOWN HALL MEETINGS

From time to time it will be necessary for the parish rural development committee to call another Town Hall meeting.

Committees organized at the organizing for action meeting, as well as community committees, will be given an opportunity to report progress. This will give them an opportunity to enlist additional aid in carrying out their projects and also keep the rest of the citizens informed.

Another purpose of the meeting would be to insert a new problem into the process. A resource person would be invited to speak on one of the other high priority problems. This could be selected by the rural development committee, or they could take the next highest one on the priority list from the Town Hall meeting, or select one the citizens have shown concern about.

The resource person should discuss possible alternatives in working on the problem. He should try to encourage the citizens to organize a committee to do further study.

After the resource person has spoken and the committees have reported, the meeting should be divided into groups. Each of the previously organized committees could have a meeting, and those citizens interested in the new problem could meet with the resource person.

This last group should follow a procedure similar to the organizing for action phase in that they should discuss the problem further, and then decide if they wish to continue. If they do, then they should select their chairman and secretary, and set a date for their next meeting.

In addition to news items and radio spots, a letter should be sent to all people on the original mailing list, as well as others who might be concerned about the new problem being inserted into the process.

It would be at this type of meeting, that the committees which have solved their problems could report their achievement, be congratulated, and then officially disband to allow members to devote time and effort to new committees being formed.

RESULTS

The results achieved from the problem identification surveys conducted in sixteen parishes in Louisiana varied due to such factors as personnel, cooperation, and follow-up.

One of the most far reaching results of the surveys was that the process provided an opportunity for people to sit down and discuss mutual problems. One problem that kept coming up in the surveys was "a lack of interest by the leaders and the people in working together to solve community problems." This was stated in many different ways. It came up in every survey and in one it was listed as the number one problem. At that particular meeting, one of the citizens stated at the conclusion: "This meeting is a ray of light on meeting our number one problem."

Solid waste disposal was another problem that come up in all the surveys. After citizens committees were organized, and started studying the situation, one police jury (governing body) initiated procedures for studying and implementing a solid waste disposal system, another is in the process of utilizing revenue sharing funds to institute a similar program. One citizens committee traveled to other areas to observe their solid waste disposal methods and then, working with the police jury, helped pass a one half million dollar bond election with a 5 mil maintenance tax and a 4 mil tax to pay off the bond issue. In sharp contrast, in another parish where the citizens' committee did not operate, a 2 mil tax was turned down for the same purpose.

The increased enthusiasm of the Cooperative Extension Service staff as well as rural development committee members for rural development was easily observable. These staffs which are primarily agriculturally oriented had an opportunity to meet new leaders and find out that agriculture problems were not significant. Agriculture accounted for less than 3% of the problems listed.

Of the people listed as leaders by the rural development committee, only about 50 percent of them were seen as such by the citizens. This helped give our rural development committees greater insight into the true leadership of the parish.

One interesting case was where the white people listed a black principal as a leader while none of the black citizens listed the same principal as a leader.

On the average, we interviewed about 100 leaders in each parish. They were sent letters inviting them to attend the Town Hall meeting. We averaged about 60 percent attendance at our Town Hall meetings and none of our agents could match this percentage for any other subject matter meetings.

Vocational education in the high school system was a problem in one parish. The superintendent of education stated at the Organizing for Action meeting that he was unable to do anything with his present staff and present budget. A citizens' committee was organized and visited some other parish to observe their methods and within a year an electronics course, a welding course, and an automobile mechanics course was instituted in the high school with no additional staff or budget.

Recreation is another problem that keeps coming up and one committee is working with the Corps of Engineers to get some land turned over for a recreation site, in another parish the committee is cooperating with the Junior Chamber of Commerce in instituting a park, and in one of our coastal parishes the committee is working on recreation facilities on the beach.

A direct result of inviting personnel from the Employment Security office to be a resource person on the jobs problem resulted in a branch office being opened to cover a three parish area.

The committees are working such various projects as beach erosion, drainage, roads, and in one parish where they have four active committees at present, they have requested training for their committees on how to conduct meetings as well as develop potential of their people.

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Human Resource Development: Community Organization and the Role of Evaluation Research

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ABSTRACT

Human resource development designs have been implemented in various programatic schema over the last decade. All approaches, from the traditional extension education design to radical social action, have had an effect upon the client systems. Most individuals and organizations involved in human resource development are searching for more effective methods and programs.

One approach to human resource development is community organization. The objectives of the Northeast Kentucky community organization program are to stimulate people in communities to learn the techniques of group organization and activity so they can realize common community goals. Also as groups are socialized into different roles of social participation they began to extend themselves beyond the community boundaries which may stimulate new economic enterprises to locate in their communities which could expand the job opportunities for them as well as for the larger multicommunity area. New social skills, learned in the community, also increase the potential for interaction and decision-making within the multicounty region.

The para-professional extension assistant seems to be a very important input into the instigation of community organization. A major advantage of the para-professional extension assistant is that he/she is indigenous to the county in which he/she works. Human resource development is also served by socializing the paraprofessional assistant around skills of community organization and action.

To provide a data base on the community organization approach and the use of para-professional change agents longitudinal evaluation research is employed. This brand of applied research serves a dual prupose: 1) it provides feedback to the community and paraprofessional while organization is taking place and 2) it provides an overall analysis of the effectiveness of the total human resource development program.

This paper will attempt to represent an operationalization of the abstract concept, human resource development, by describing a University of Kentucky Cooperative Extension program involving community organization. A research aspect was built into one segment of the community organization project to gather systematic data which can be used to evaluate the progress and achievements of this program. This type of "evaluative research" [1] also attempts to feedback data collected in the community, to the community, so individual citizens and the change agent might gain a systematic picture of their community and organization.

Human resource development might be defined within the rubric of fulfillment of human potential. More specifically, with emphasis upon the single concept development, the possibility of conscious or deliberate attainment of desired goals or targets (Apthorpe, 1970:3). Human resource development is a process of creating organizational potential for the use of resources, both natural and human, which could realize satisfaction of felt needs, e.g. increase in per capita income, employment in the community, or a "clean" environment.

In rural Kentucky there are many small rural communities in which there is significant potential for a better life for all if only the local people could meet together, plan, and take appropriate action necessary to capitalize upon both natural and human resources. Not only are most of these people unaware of the potential they have, but they have little idea how they might go about organizing their resources to achieve felt needs.

The income of rural Kentucky people is low when compared to state and national levels. With the exception of the church, which seldom exercises an extra-denominational influence in their lives, rural Kentuckians' cooperation in other organizations is practically non-existent. This might also be a result of their intense individualism. The lives of these rural people are oriented toward care of their families at an individual family level, and not directed toward group alleviation of problems.

It should be recognized that Extension agents have since their inception worked to organize local people into viable groups to solve various production and community service problems. However, it has been only in recent years that in-depth efforts have been made to secure large numbers of organized communities to function under project categories.

The first of such efforts for large numbers of organized communities began in 1955 with the advent of USDA Rural Development Program. Leadership for the organization was assumed by Vocational Agriculture and the Extension Service to make available to such organizations the fuller benefits of all USDA agencies. One county in Eastern Kentucky was chosen as a pilot county. This activity over a four year span spread to four peripheral counties with a total of 23 organized groups; however, direct agricultural agency input into mountainous counties where interest in production agriculture is minimal at best, failed to create and maintain the interest in community organization as had been hoped by professional Agency people.

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[1] In the Edward A. Suchman sense of the term.

The realization by professional Extension Agents and local lay leaders of the progress which had been made through community organization and the potential for increasing directed growth in even more communities necessitated an in-depth evaluation of the process.

In 1960 a cadre of professional Extension workers, members of the Ashland Area Chamber of Commerce, and representatives of a power company and a bank located in Ashland met to determine direction and promotion for an area wide drive to encourage more communities to life themselves by their own "Boot Straps."

In 1961 an organization known as the Northeast Kentucky Rural Community Development Association was formed encompassing ten Eastern Kentucky counties with two additional counties being added in 1967. A board of directors composed of three lay leaders from each county was established. It was a stated desire of the founding organizations that the leadership of the organization should be vested in the hands of those people who were participating members of local community organizations. The primary objectives of the overall NEKRCDA are to (a) offer incentive awards for achievement (b) furnish leadership and ideas for local programs and projects, and (c) serve as a vehicle to maintain an open forum for discussion of new ideas.

Twenty-three organized groups were enrolled in NEKRCDA in 1961. Growth has been gradual, reaching a total of fifty-nine such entries in 1971. The advent of seven para-professional Extension Assistants to help local professional Extension Agents and some community action organizers pushed the 1972 enrollment to seventy-three clubs representing 1100 families or 34,000 people in the twelve-county area whose total population is 280,000 people.

The involvement of 34,000 people in rural Eastern Kentucky communities was based upon a very simple procedure. The change agent would identify local community leaders who in turn would indicate community needs. These needs would be tested for validity among other citizens in the community. If there was enough support among the community membership to initiate action, a community meeting was arranged to discuss these problems and seek solutions.

Priorities would be assigned to the "felt" needs generated by the communities. The change agent would only influence the citizens to assign high priority first to projects which would encourage social participation and few economic resources. A typical "first" project might be a community cleanup campaign which requires a great deal of social interaction and a pickup truck to haul the "junk" away. Bigger and more sophisticated projects follow when the people in the community begin to participate with one another.

Active participation of local people in their own community organization has influenced many to become motivated to group activity outside of their local community, including involvement in County Community Development Committees, County Development Association, Community Action Boards and NEKRCDA Board of Directors.

The socialization process of a community development organization is, however, much better understood when observed in people from the onset of organization of the local level -- when a man who does not read or write is elected Chairman of his local group -- yet two years later, in clothing purchased by local subscription, receives a plaque from the governor of the state; or the man, elected to a position of leadership, freely requests permission to remain seated in conducting a community meeting because he is too nervous to stand, yet who six months later gives a progress report to thirty-five strangers, standing; a school teacher who as chairman elicits support from all attending citizens to serve on functional committees and assume responsibility to carry out their assignments to fruition; or the community banker and businessman who for reasons of politics haven't spoken in nine years work together to secure the services of a doctor -- these are the true effects of group action on felt needs of a community group.

The end results of the Community Development process can be described in either hardware items or attitude change in people.

Hardware items, those things which can be seen and make newsprint are:

(1) miles of water lines and the hundreds of customers

(2) 2 medical centers

(3) one new factory employing 85 local people

(4) 16 local playgrounds and parks

(5) 2 new community centers built in 1972

(6) average of 1 3/4 clean-up campaigns in 73 communities

(7) establishment of solid waste disposal systems

(8) half million dollar neighborhood center facility

(9) community greenhouse

(10) Community Development day camps in 2 counties for 375 children

Probably the greatest and most lasting human resource result of community organization is that part of the process which changes the attitudes of those people involved at the local level which manifests itself in action rather than apathy, in involvement rather than abstinence. This process can best be described by excerpts from a "Letter to the Editor." Sixteen members of a college class toured organized communities in Eastern Kentucky and a young man described the tour and the community club leaders as follows:

"Your community proved not to be an exception to the various communities we visited in Eastern Kentucky. Everyone we met was a "true" person: someone with a sincere cause, someone who realized the scope of his endeavors, someone who sacrificed time and labor to achieve the sought after goal and someone who upon attainment of his goals realized that there is more to be done if only "someone" will care enough to do it. We saw that "someone" many times over. In a world where community service is sorely lacking, you have made it a way of life -- where concern is insufficient, you have made it abundant -- and where strangers are somewhat viewed askance, you made them feel welcome." Prior to the organization of the communities that this group visited this could not have been said.

An Editorial in the largest newspaper in the area involved in the process said in 1971 of the Community Development program: "It is a stimulus to do something." "They can't be willing to stop with federal programs. It keeps reminding them there are some things they can do for themselves."

"It shows that some smaller communities are sincerely devoted to accomplishing, doing things we take for granted."

"They are doubly rich: they have not only earned new pride, but they have forever in their communities the practical results of their combined labors."

Many more examples about the success of community organization in Eastern Kentucky might be presented; however, social and economic development at the individual and small community level might be viewed by some as too "narrow" an approach to the development of human potential and grand social reform for large geographic areas. It is important to view not only the specific community and its activities but also the support system or administrative structure to realize the total developmental potential of this community organization project.

Community organization has the dual purpose of : (1) giving the people of Eastern Kentucky communities the opportunity to learn ways of improving their standard of living and (2) employment of unemployed and/or under-employed indigenous persons as Extension Assistants in Community Development and training them in the skills necessary to direct communities in improving their lot. Specifically, this project is designed for the Extension Assistants in Community Development, back-stopped by professional Extension Service staff to:

(1) Stimulate the people of selected communities to learn the techniques of group organization and activity -- how to work together and how to organize themselves to reach common objectives.

(2) Stimulate the people to bring about improvements in the local economy -- expanded and new enterprises which provide more permanent employment with emphasis on the expansion of jobs in the private sector of the economy.

(3) Stimulate the people to bring about improvements of local social institutions -- family, school, health, recreation, and government.

(4) Stimulate the people toward greater involvement in the total society -- using appropriate technical, financial, and educational resources, to the extent that they become better informed and more active regarding pertinent public affairs issues.

(5) Stimulate the people to have more self-reliance and self-realization -- learning and applying new attitudes, knowledge, and marketable skills in work and play -- and finally to:

(6) Enable each of these Extension Assistants in Community Development themselves to acquire the skills necessary to guide community groups toward accomplishing the aforementioned objectives.

All project employees and Extension staff (this includes professional Extension personnel and Extension Assistants in Community Development) involved in the initial phases of this project participated in a three-day orientation program on the operational procedures of Extension Assistants in Community Development. The content of the training program was developed by professional Extension personnel who were to administer the program, along with local people who are knowledgeable about the Community Development process. Training was aimed at getting a complete understanding of the project proposal -- objectives, content, administration, and operational procedures. This also included the relationships among existing development organizations, the expected roles and role relationships of the various participating professional Extension personnel.

Supplementary discussions on the present situation on the county -- culture, family life styles, community organizations, power structures, and available resources, along with program evaluation techniques and instruments, were covered. Other aspects of the training program were and continue to be developed and incorporated into the in-service orientation as determined by the Area Extension Directors, Area Extension Specialist in Development and County Extension staff members.

Community programs are continuously evaluated in each selected community to determine the progress being made by the local people and the effectiveness of the extension assistants' performance in such communities.

The following excerpt from one of the assistants' monthly progress reports suggests that para-professionals can indeed motivate and organize people to improve their community.

> I have visited most of the clubs in Carter County. Most of them are doing a right good job. 1. The Soldier-Brinegar Club is building a new meeting place. 2. Globe-Upper Tygart Club is working on a water project and a primitive hunting area for their park. 3. The Smokey Valley Club is adding onto their Community building. 4. Norton Branch is going real strong, with a lot of work and participation from the people in the community. 5. Stinson is working on a water system. 6. Lindsey-Pactolus is continuing a well rounded program. 7. Hitchins did a good job last year and they are carrying their program on into this year. 8. Davy's Run is still going strong. The new Community Building is complete,

a country store has been built and sales are real good. More work is being done at the Mt. Savage Furnace. 9. Dicie Park is holding classes in Ceramics and Carpentary. 10. Grahn and Willard seem to be our slow clubs. It seems to be hard to keep interest with these communities. 11. The Rush Club has a new Community Building almost completed. At their fall festival they took in around $600.00 for their program. 12. The Princess Community is in need of a meeting place. Ken Franks wrote a letter to the company owning the old store building but no reply has been received.

Similar progress and success is being realized by the entire staff in the Northeast Kentucky area within 72 of the 400 potential communities in this area. More and more of these community organizations lead to "spin off" groups such as Homemakers and 4-H Clubs as well as groups interested in learning more about certain phases of agriculture. In view of this trend most informal adult education programs such as extension as well as the services of other agencies could be implemented or delivered thru community development clubs.

The extension assistants in community development and the professional backstoppings in this project cost the taxpayers less than $50,000 annually, yet the progress being made by the citizens of these 72 communities is fantastic. Wouldn't an additional investment of $250,000 annually, to help the citizens of the entire Appalachian area of Northeast Kentucky help themselves, through education and motivation, to make their community, county and area a better place in which to live, work, worship and rear their young, be a good investment?

Until 1972 most of the evaluation of community organization projects in Northeastern Kentucky were not scientifically based and in most cases non-systematic in nature. Most individuals involved in this project knew that "good" and "fantastic" results were being made through this project. However, "proof" of the project's legitimacy and total effectiveness was not gathered. One might ask at this point, why expend the human and economic resources necessary to systematically analyze a program where intuitive evaluations are positive? Three responses surface; the urgent need in American society to develop procedures which will bring about social change in a systematic, orderly, and rational manner, legitimization of tax dollar expenditures on human resource development, and the advancement of scientific knowledge related to externally stimulated social change programs.

The need in American society, especially rural America, to develop procedures which will bring about systematic, orderly and rational social change in of utmost importance. We have observed the "social planning" which occurred is urban areas over the past decade and can now see the void of systematic social change procedures. Politicians and administrators of rural welfare and educational programs are now orienting their interest and economic resources toward rural problems. Before particular solutions to rural problems are institutionalized within an action-oriented bureaucracy or codified by politicians, information concerning outcomes of possible alternative solutions to given rural problems should be disseminated to decision-makers. Ideally, procedures for social change could be organized to develop a readiness to meet new conditions in most rural areas. These social change procedures can only be developed from existing and future evaluative research methodology (Fairweather, 1967: 3-5).

Legitimazation of tax dollar expenditure will become even more important with the increased control of this economic resource at the state, county and city levels. In the past expenditures for social development programs have been large and accessible with federal government administration. As the tax dollars are appropriated through state, county and city channels more scrutinizing of program goals may occur because the specific social development programs are more visible to the economic decision-makers. If evaluative type research is carried out on existing and future rural social change programs, at least, a systematic view of the program can be presented to tax dollar decision-makers.

The lofty ideals associated with the advancement of scientific knowledge will not be discussed per se. The major point to be discussed is the development and improvement of evaluative research methodologies which will yield a valid representation of the programs investigated. Fairweather (1967) states that evaluative or innovative type of research methods must be a specialized marriage of service procedures and research techniques. A marriage involving understanding of the social development program's objectives, goals, personnel and impact upon citizens and appropriate measurement techniques to capture the social relationships and changes stimulated. At this point, a discussion of the specific evaluative research procedure used to access the County Employment and Community Service Project in Northeast Kentucky might indicate certain aspects of this program-research marriage. A review of the program objectives on pages 7 and 8 might be useful to better understand the "service procedures" aspects of this program.

Two general ideas are the basis of this evaluative research: 1) a scientific investigation of existing social participation patterns in communities and changes in social participation occuring when stimulated by the formation of a community organization with the objective to facilitate felt community needs, and 2) a feedback procedure which allows the information collected to be used by the community as a tool to facilitate present and future program development within the organization.

The objectives are as follows:

Objective:

1. To secure benchmark data (Phase I) on communities selected as participants in the County Employment and Community Services Project.

Sub-objective:

A. To collect benchmark data from each household (complete enumeration) in the participating communities.
B. To determine the number of individuals living in each household, their ages and relationship to the head of the household.

C. To determine the occupations of the individuals working in each household.
D. To determine the institutional services utilized by the household, such as, educational opportunities including formal public school, vocational training and cooperative extension service programs, medical services including public and private health programs, religious participation and involvement in county, state and federal welfare services.
E. To determine the amount of household participation in community organizations such as electric and water co-ops, fraternal lodges and social and economic development organizations.
F. To determine the level of identity the household has with the community. In other words, how much do the members in each household feel a part of the community.
G. To determine the level or amount of agricultural production by the households in the community.
H. To determine the community (felt) needs as perceived by a member in each household.

Objective:

2. To explain and communicate benchmark data collected in each community to the development resource para-professional working in the participating community.

Objective:

3. To interpret the sociological relationships and data collected in each community.

Objective:

4. Phase II of the evaluative research will include longitudinal anlaysis of the effect of community development organization on the participating communities.

Sub-objectives:

A. To determine what, if any, changes in the community leadership structure resulted from the instigation of community organization.
B. To determine changes in information seeking behavior (newspaper, radio and/or TV) stimulated by the organization of a community organization.
C. To determine if a community organization will change the travel patterns of individuals in the community (localite-cosmopolite relationship orientation).
D. To determine changes in knowledge of political activities and participation in the community stimulated by community organization.
E. To determine if individuals in the community identify (empathy) or cooperate with other members of the community after a community organization is organized.
F. To determine the effect of a community organization on time orientation, past, present and future, attitudes held by individual community members.

G. To determine the effect of a community organization on fatalism (meaning of life) attitudes held by individual community members.
H. To determine the effect of a community organization on effort-luck-achievement attitudes held by individual community members.
I. To determine the effect of a community organization on individualistic-collectivistic attitudes held by individual community members.

Phase I of the evaluative research is being conducted in fourteen communities involving 630 families in Eastern Kentucky. Phase II, the longitudinal aspect, also includes the same fourteen communities and 112 families. The Phase II evaluation will cover a three year time period.

Results thus far are very few due to the short time period of the project. However, indications are that families in the fourteen communities do not take advantage of social participation opportunities which exist in their communities. Each of the fourteen communities have instigated a community organization which is beginning to work toward the solution of problems.

In conclusion, the idea to present a paper of this type was stimulated by two sources: 1) the discussion on rural development at the ASAW meeting in Richmond, Virginia, 1972, and 2) a growing concern on the part of researchers and extension personnel in Kentucky to cooperate in action-research ventures. We hope our ideas stimulated thought about this aspect of human resource development and how evaluation might be carried out.

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ROLES OF COMMUNITY DEVELOPMENT ORGANIZATION IN BALANCED DEVELOPMENT

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In the transition from an agricultural society with small farm operators living and working on dispersed farmsteads to an industrialized society with population massed around an urban center where rural residents commuting for work in trade and services, the rural neighborhood faces a cruical period of adjustment. Rural development organizations are to be seen as major agencies in such adjustments. The organizations are concerned with the development activities and adjustments to the occupational shifts and population changes. In recent years there has been a growing interest in rural development as a means to help improve agricultural production and standards of living. It has been pointed out that trade area programs and community development programs have been effective in increasing incomes and raising levels of living.

The community development usually involves the works of local organizations which are interested in one or more distinct areas, such as, recreation, child welfare, health protection, agriculture, education, beautification, etc. In some cases these interests may seem to relate to separate organizations that act independently or seem to present needs for action which they monopolize. Efforts are needed today in local organizations to make services available, to offer integrated patterns of services to meet the varying needs of local groups to coordinate services to prevent overlapping and overlooking, to provide opportunities at the local group levels for people to form groups through which they can act together, and to provide channels for groups to act together to change social goals and create new ones. Community development organizations are the typical forms of organized response to these problems.

Community development organization is ideally inclusive of all the major organizations and interest groups in the community. It is a voluntary body, usually representative of organizations within a local area and providing for participation of individuals as well. It is an intergroup relationship which is organized in a council, with the organizations represented being the channels for broad community participation.

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In the context of the community field theory the central feature of community development is termed a generalizing process where the actions of the organizations are viewed in the light of integration and differentiation among interest fields identified with the locality and population. The focus is upon interaction, and the interactional structures of the community, and in turn, it leads to the study of associations which are expressly organized in some localities to coordinate and conduct development programs in a variety of interest areas.

The purpose of this study is to delineate the functions of the community development organization in the total development of the community life. The emphasis is placed mostly on the theoretical level in order to define the different aspects of community development and the subesequent role of the community organization as a type of local development structure. The study indicates a model of the effective community development organization in the perspective of the coordinating organizational structure, oriented for an overall balanced development in a local society.

The Concepts of Community and Community Development

Community is the sense of geographic space, cultural configuration, and collective action often appears in the literatures of community studies. Ecologists emphasize on definite geographical referent centered in economic life as the basis of community structure (Alihan, 1938; Hawley, 1950), whereas the anthropologists view community as a sociocultural whole with the local institutions as the major units of analysis (Redfield, 1956; Arensberg and Kimball, 1965). Similarly, the proponents of the social system approach emphasize institutions and view community as an aggregate of interrelated subsystems (Sanders, 1966; Warren, 1972).

The perspective of the present study may be referred to as an interactional or field theory approach (Kaufman, 1959; Kaufman and Wilkinson, 1967; Wilkinson, 1969; 1970a; and 1972), where community is seen as one of the several interactional units or social fields in a local society, consisting of an action process carried on by persons working through various associations through time. Community is, thus, viewed in terms of a configuration of activities and groups, with place, population, and instutions providing the necessary background. The chief virtue of the concept of community is that it emphasizes the qualitative aspects of human development rather than the quantitative ones. It is the presence and effectiveness of the interactional networks which make possible integrated action on the common concerns of life, and that determine the extent to which community exists in a given place.

In the present perspective, community is linked to a social field, which emerges from multiple institutional-interest foci, related to one another through a "generalizing process" in the local society. This generalizing process, which may be termed development, is characterized by two action processes, differentiation and integration. These processes are carried on by individuals through various types of associations, through time, with direction toward some distinctive outcome and changing elements and structures in the local society. Differentiation involves mobilization of resources to different interest fields in order to develop a multiplicity of associations and informal groups with an aim to accomplish a high level of achievement, specialization and elaboration in each of the developed interest fields. Integration is seen in terms of centralization of location of services and designated as the process of coordination and consensus of activities across the interest field.

These two processes further indicate the complexity and the nature of rapid change of the community field. The complexity arises from the elaboration and specialization of the interest areas where individuals in the local society pursue a number of interests in living and accept memberships in many groups in order to realize these interests. When complexity of associational life is seen along with rapid change maladjustments, dislocations, tensions, and various problems increase in severity, individuals then realize the need for coordination and planning in order to facilitate more harmonious and efficient change and security in life. At the associational level, community represents the problem solving and decision making processes of the local society and becomes a network of interrelated associations both formal and informal.

In other words, the complexity and rapid change of the community field indicate its dynamic nature and development, which signify purposive, directed and gradual change from something thought to be less desirable to something thought to be more desirable. In this respect, community development is defined as an organized activity of the individuals in the local society with the aim of satisfying certain common needs in the process of creating new structure and adaption to new attitudes and skills.

Different ways of Viewing Community Development

Many treatments of community development deal only with the structural elaboration in the local society particularly emphasizing economic development (C.S.R.S., 1970; President's Task Force on Rural Development, 1970; and Oberley, 1972); and ability in problem solution (Eldridge, 1970; French, 1972; Hillary, 1972; and Warren, 1972).

Sanders (1958) suggests that community development is derived from and possibly borrows its schemes from economic development. He further introduces four current ways of viewing community development: (1) as a process, with a focus upon sequences of interaction; (2) as a method, as a means to an end; (3) as a program consisting of content as well as procedure; and (4) as a movement, involving personal commitment and an emotional dynamic (Ibid:6). As a process community development puts emphasis upon what happens to people, socially and psychologically; as a method it places emphasis upon some and; as a program it emphasizes activities; and as a movement it tends to become institutionalized, building up its own organizational structure, accepted procedures, and professional practitioners.

When community development permits social change without breaking its links with the past, puts emphasis on the central role of the individuals participation in the locality relevant activities, and is concerned with an overall emphasized, integrated development of the total community life, it is termed as balanced development. Balanced Development is an attempt to develop simultaneously the social, cultural, economic, and human conditions of the people emphasizing all of the interest areas in the local society. The balance development program grows out of the felt-needs of the individuals in the local society and is dynamic. Self-help is the basic principle and voluntary cooperation is the key process while the participation of all groups in the local society is important. Help from outside the local society is used, but is not sufficient to increase the dependency of the individuals. It assumes responsibility for approaching the local society as a whole. Its greatest contribution is the recognition is the recognition of the coordinated democratic action.

Sparkman (1961) views balanced development as emphasizing on economic development and indicates it as a link between the local development and the national development. The aim is to utilize the latent resources of unused or underused labor, skills and knowledge, and to increase motivation in the individual to produce better. It is also seen as an important tangible effort by new nations to bring effective freedom to its citizens; as a means of unifying the people in a movement for national improvement; as a contributing source for developing and strengthening local institutions, self-government, and promoting civic responsibility.

In the context of the interactional perspective, community dev development puts emphasis on both structural elaboration and coordination. It, further, proposes that effective development takes place in the community field by mobilizing resources from a variety of interest fields and applied to a particular interest field where there is a need; and to sustain long run achievement across the board coordination is required among the interest fields (Wilkinson, 1969:33). This effective, community development is termed as comprehensive development, and is, further, defined as a "planned and coordinated type of activity in which the several institutional interest fields in a local society change and adjust one with the other toward the desired new forms" (Kaufman and Dasgupta, 1968:2). As the concept of balanced development, defined earlier, emphasizes the same notion as that of the concept of comprehensive development, these two terms are used synonymously in the present study.

Elements of Community Development

To elaborate further, these development processes occur as individuals in the local society act singly and in concert through informal groups and structured organizations for project accomplishment. This creates structural coordination which develop and unify the local society. Such development processes and structures therefore, can be observed through the three analytical units of the community field; actors, associations, and actions.

Actors in a community field are characterized by generalized leaders, who are usually a small number of individuals, the key contributors to the task accomplishments and maintenance of the structure of the field. These generalized leaders are also effective participants in a variety of interest fields. As these leaders are found to be involved in multi-interest fields, they are related to one another to constitute a network of coordination through the formal and informal associations in a variety of interest fields.

This coordinative nature of the associational structure can be observed in the context of the generalized leadership pattern among the development organizations. This leadership pattern is found in the "generalized coordinating associations which serve to initiate, sponsor and coordinate activities in many interest fields and help creation of new structures to deal with newly identified community problems" (Dasgupta, 1972:4)

Actions in the community field may be distinguished from others in the local society according to the degree of inclusiveness of interest fields, the extent to which the action is locally oriented, identified, participated in, and affects the local society in terms of stability and change. Programs of community action are interrelated at the associational level through groups and organizations which coordinate and carry out community actions. The group relationship may consist of the associations of actors who are participants in several action programs, or it may involve multi-interest planning and action by a formal community organization (Wilkinson, 1970b:57). Although the degree and the nature of the group relationship are variable, they are both essential for a community action program in "task accomplishment" and "structure development".

Community actions, further, may be classified according to whether consensus or conflict is salient in decision making, or whether the program is accomplished through autonomous or coordinative procedures. Within a local society, the autonomous procedure for community actions are taken by autonomous structures where the various interest fields operate more or less independently in relative isolation with a minimum of overlap among the interest fields. In such cases actors participate in a single interest field, and there is lack of coordinating organizations. On the other hand, the coordinative procedures for community actions are characterized by generalized structures of leadership and organizations, where interaction occurs between multi-interest leaders and associations to carry out a comprehensive, integrated program of development in such local societies. Thus, the later type of action procedures encourages developing coordinating community organizations to facilitate the balanced development programs in the local society.

Community Development Organizations

To facilitate the balanced development programs in the local society a look at the structural aspect of planned change is needed, where strong and relevant locality-oriented institutions and interest fields demand a continuing, effective, local development organizations. Such organizations are essential to adapt the existing structures so that they may be more efficient and be able to create new structures.

In a local society a wide range of organizations varying from small informal groups to highly formalized organizations are prevalent. Some of these organizations are not locality-oriented, they are very narrowly structured toward some special, limited interest areas, and therefore never appear in the community field and are not considered as part of the organizational structure of the community field. On the other hand, all of the organizations which are locality-oriented, would appear in the community field and are considered in the organizational structure of the community field. Many of these locality-oriented organizations are mainly structured for participating in community actions which are oriented toward special, limited interest fields, while only a few organizations would expressly be organized to coordinate and conduct development programs in a variety of interest fields.

Within the community field, thus two types of community development organizations can be categorized, namely, the coordinating community development organizations and the special or limited interest community development organizations. The coordinating organizations would participate in a relatively large number of community actions which include several interest fields of the local society. These organizations identify the needs of activities in several interest fields and sponsor the activities accordingly, and direct and coordinate participation of the various groups and organizations within each interest field. Furthermore, the coordinating organizations provide effective support in program execution by mobilizing local and external resources even where the activities and programs are initiated by the limited interest community development organizations of the specific interest fields. On the other hand, the limited interest community development organizations initiate and participate only in activities and programs within their own interest fields.

To identify the coordinative nature of the community development organizational structures in a local society three operational measures have been suggested by Dasgupta (1972;5-6): (1) the total number of organizations participating in various community relevant activities; (2) number of organizations playing coordinating roles in the community field; and (3) the extent of interlock among the coordinating organizations across various interest fields. A large number of organizations appear in a local society where a highly coordinative organizational structure exists. The coordinating roles of the organizations are measured in terms of percent of all actions in which each organization participated with respect to the interest areas involved. In this procedure the central or the vital coordinating organization could be identified, which will be found to be participated in the maximum number of community actions involving in all interest fields in the local society. This type of central coordinating organization is designated as the generalized coordinating organization in the community field, and in the process this type of organization exerts an overwhelming coordinating influence on the organizational structure of a local society.

The Effective Community Development Organization: A Model

It has been noted above that organizations operating at the community level most always have development as well as coordinating functions. The effective community development is characterized by the processes of differentiation and integration, which are planned and coordinated within the several institutional interest areas by the generalized coordinating organization in the local society.

To accomplish the community development programs the generalized coordinated organization coordinates the activities of the several groups serving the locality, discovers and utilizes the resources to meet locality needs, and makes overall long-term planning for the development of the local society. In addition, this type of organization helps in creating new organizations and in building new institutions in the local society to facilitate development.

In summarizing the essential features of an effective community development organization for balanced development the following factors could be noted: (1) development or elaboration of new institutions and structures to meet the needs of the local society; (2) coordination or integration of various local organizations and institutions in task accomplishment to realize balanced development; and (3) an extensive use of local and external resources in conducting the desired activities. The development or elaboration of new institutions and structures may be seen at the ecological, the cultural, and the social levels. The coordinating organizations, at this stage, identifies the recognized locality-relevant interest fields and develops the structure to cut across interest fields. Then, coordination is sought for by the coordinating organization with respect to the cooperation between the new structures and key leaders, and integration within the created institutions and interest fields. Coordination is observed in terms of joint participation of organizations in initiating and in supporting community actions. The mobilization of the local and external resources by the coordinating organization includes technological knowledge and skill, financial support, and legal authority. In this respect, the organization faces the problem of examining each social field and of seeing the points and processes of merger of this field with the community's generalizing process (Wilkinson, 1970a: 320).

In the perspective of the generalizing processes of differentiation and integration, hence, the roles of the coordinating community development organization for an effective balanced development in a local society can be outlined through six characteristics (cf. Kaufman, 1969;10): (1) comprehensiveness as to institutional interests; (2) effectiveness in recruiting leadership as well as mass support; (3) establishment of strong voluntary organizational structure along with effective cooperation of government; (4) selectivity in the use of outside resources; (5) an effective blending of organized and informal community activities; and (6) a fine mix of technical problems with normative concerns.

It should be noted, while elaborating on the roles of the effective community development organization, that all types of community relevant organizations involved in major institutional areas are coordinated together through planning and programming by the coordinating organization. In this respect, a number of major decisions and efforts are to be carried out by a relatively small group of key leaders in the community, and hence to become more effective in the development programs the coordinating organizations needs to be effective in recruiting leaders in the community and in gaining mass support. In addition, for mobilization and utilization of the local and extra-local resources the coordinating organization needs to maintain effective relationship with the government, local and national. In areas with little or no organizational base and mass illiteracy, government in general takes an active part in the local development programs, where most of these programs are in special interest areas and have less emphasis in multi-interest fields. In such cases, the roles of the coordinating organization is to establish strong voluntary organizational structure to generate effective cooperation with the government and to create effective locality relevant programs in multi-interest fields.

Regarding the utilization of the extra-local resources the external organizations including the national government and the coordinating organization enter into a creative partnership, mobilizing resources as necessary and working out community development programs and goals jointly. But the coordinating organization must be selective with respect to its utilization of external resources to the extent the decisions regarding various activities in connection with the programs are taken by the local leaders to maintain local control over the programs.

Furthermore, the effective community development organization must have a blend or balance of organizational rationality with the concerns and intimate communication allowed in primary groups. The objectives of such an organization are more diverse, broader and more flexible as the relationships between the participating organizations and groups are maintained at a very informal level. Decisions making and participation at various levels of program accomplishment are more democratically oriented so that the interests of the entire population in the local society are included and all segments of the population have complete access to the decision making processes and to the participation structure.

Finally, the effective community development organization must be involved in a careful blending of the normative and the technical aspects of the institutions. When looking through the perspective of change, the normative aspects of the institutions are found to be changed very slowly where as the technical aspects are changing very rapidly as the development programs are accomplished. This difference in rate of change in the two parts of the institutions raises the socialization problems in the local society, and hence the coordinating organization needs to be involved in integrating the normative values and the technical aspects of the institutions to be effective in balanced development in the local society.

Summary

An attempt has been made in this study to delineate the functions of the community development organization to be effective in balanced development in a local society. The discussion is developed in the context of the community field theory, where community is viewed as a process of interaction through time carried on by persons working through various associations in a local society. It has a multi-interest focus and a generalizing influence on the local society. This generalizing influence, which is termed development, is characertized by the dual processes of structural elaboration or differentiaction and coordination or integration. Balanced development has been indicated in this study as the effective community development and is defined as a planned and coordinated action involving several institutional interest fields which change and adjust in a local society with respect to one another toward the desired new forms.

This study has, further, emphasized on a coordinating community development organizational structure for an effective implementation of balanced development in a local society. A coordinating organizational structure stimulates elaboration and differentiation of the existing organizational structures, and creates new forms to handle the problems and needs in a multiplicity of interest fields. At the same time, the same coordinating structure integrates the several institutional interest fields, and coordinates the organizations and groups participating in the interest fields in the local society. In the perspective of the generalizing processes of elaboration and coordination, this study has outlined six important roles of the effective community development organization to conduct and accomplish balanced development in a local society.

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SCALE THEORY: HEURISTIC MODEL FOR A BASELINE SURVEY AND SOME SOCIAL INDICATORS IN TWO APPALACHIAN NEIGHBORHOODS--DARNELL ROAD (HUNTINGTON) AND LAVALETTE, WEST VIRGINIA

FEBRUARY 1973

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Introduction

Gestalt theory for the neighborhood! A grand goal but far more complex than we realized when last year we made an effort at exploring "scale" as a frame of reference for local level development and extension program evaluation.[1] In this paper I would like to build on the Sill, Simpkins and Comfort paper of February 1972. This is to some extent a progress report.

Last year we described "scale" (range and intensity of total relatedness) and suggested it as a heuristic device of sixteen (16) correlates useful in describing neighborhood development. The need for holistic neighborhood measurement seems as great as ever. The logic of "scale" seems sound. However, moving from these high levels of abstraction to measurement levels has proven difficult. The goals guiding our efforts were as follows:

1. Develop indices for each of the sixteen (16) correlates.
2. Relate the data produced to the Kanawha County baseline data.
3. Test for differences in scale between sample neighborhoods and selected neighborhoods where neighborhood development programs have not been carried out.

Some progress can be reported on goals one and three; however, regarding goal two, "Multi-CAP," the Community Action Program which inherited the Kanawha County baseline data, has not been able to locate it and thus the appropriateness of scale theory to a longitudinal study could not, to date, be tested. We will further attempt to up-date the case for the need for ethnographically sound gestalt theory now that community development legislation seems near and efforts at "revenue sharing" are here. The question remains--will neighborhood development on the entities' own terms be fostered and if so, how will it be measured? This study illustrates and suggests a measurement approach and accomplishes a baseline study of two Wayne County, West Virginia, neighborhoods.

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[1] Maurice L. Sill, O. Norman Simpkins and Richard O. Comfort, "Measurement in Neighborhood Development: Exploring "Scale" as a Frame of Reference for Local Development with Implications for Extension Evaluation," Rural Sociology in the South: 1972, Proceedings Rural Sociology Section, Association of Southern Agricultural Workers (February 13-16, 1972).

The Need for a Gestalt Theory of Neighborhood Development--A gestalt theory of neighborhood development would have an eye to the whole man, in a whole community, to the end that he might be whole (the sense of "hale"). Is it possible that balance (Figure 1) in the dimensions of scale is a description of "hale"-ness-- a health for the social entity providing for optimum survival chances? Simpkins feels that this is true.[2]

Figure 1

Balance in Scale

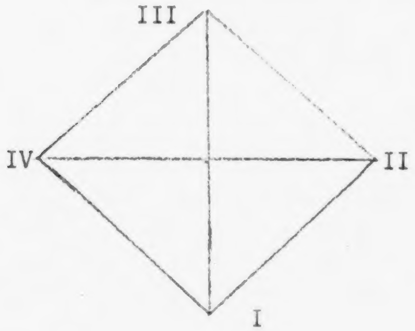
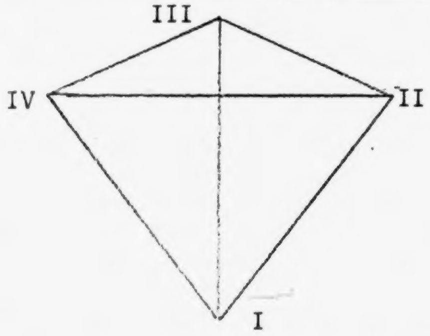


Figure 2

Distortion Toward Technology



Certainly our inordinate emphasis on technology is bending us out of shape. The exploitation and control of the physical environment without balance in other dimensions threatens to drown us in our own junk and garbage. In any case, larger scale would provide expanded personal choice, which is consonant with basic values of democratic society. Whether or not it is a panacea for survival of the race, it does seem a development goal worth striving for.

Community Development legislation is on the drafting boards. If Community Development comes in while Community Action goes out, who will inherit this local level development mandate? Whether a new agency is formed or not, it is reasonable to expect that old line agencies such as U.S.D.A. (Extension et al) and H.E.W. (Welfare et al) will incorporate more Community Development flavor in place of their "top-down" and "single-purpose" approaches. They will view more the whole man rather than some narrow aspect of his being--his eyes, ears, purse, or production. Extension is already moving, despite ponderous institutionalization, toward "bottom-up" planning around felt-needs defined as broadly as any neighborhood concern rather than around commodity production of individual farmers. Sheer parsimony, if nothing else, seems to be leading to an era of more scope again for local level decision-making and more interest in communities-- whole and "hale." If this trend is correctly guessed, it still will not last long if Congress cannot find ways to measure the intangible, though nonetheless important, ecologico-socio-cultural dimensions. In this connection we urge "scale."

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[2] Taped lectures available on "scale" by Dr. O. Norman Simpkins (February 1972), Head of the Department of Sociology and Anthropology, Marshall University, Huntington, West Virginia. Write to Involvement Education, Box 92, Lavalette, West Virginia 25535.

Scale: A Heuristic Model

First of all in this model an assumption is made that man in whatever situation he finds himself, is dependent upon others. He is dependent physically for life itself upon parents, for his early nurture and protection upon these same parents or surrogates, and for maintenance of life later upon a variety of persons, builders of shelters or providers of building materials, cultivators and distributors of food and so on *ad infinitum*. This total dependence of man upon man is not limited to the physical well-being of man. It extends also into the social sphere. Man is a social animal and these social relationships are not optional. Intellectually, too, man depends completely upon other men for the concepts and cultural forms which guide his action. All men therefore are equal in being dependent upon each other. The differences among men can be seen then not in terms of total dependency but in the varying range and intensity of this dependent relationship which is called "scale."

Small Scale--An isolated Appalachian who depends upon neighbors and kin for help in harvesting crops, raising a barn, and for social intercourse is small scale. His ideas have come to him passed on from father to son with new ideas only occasionally from the storekeeper or bartender at the mouth of the hollow or nearest village. The range of these relationships is narrow. Because he is completely dependent upon so few people, the intensity of these relationships is very great.

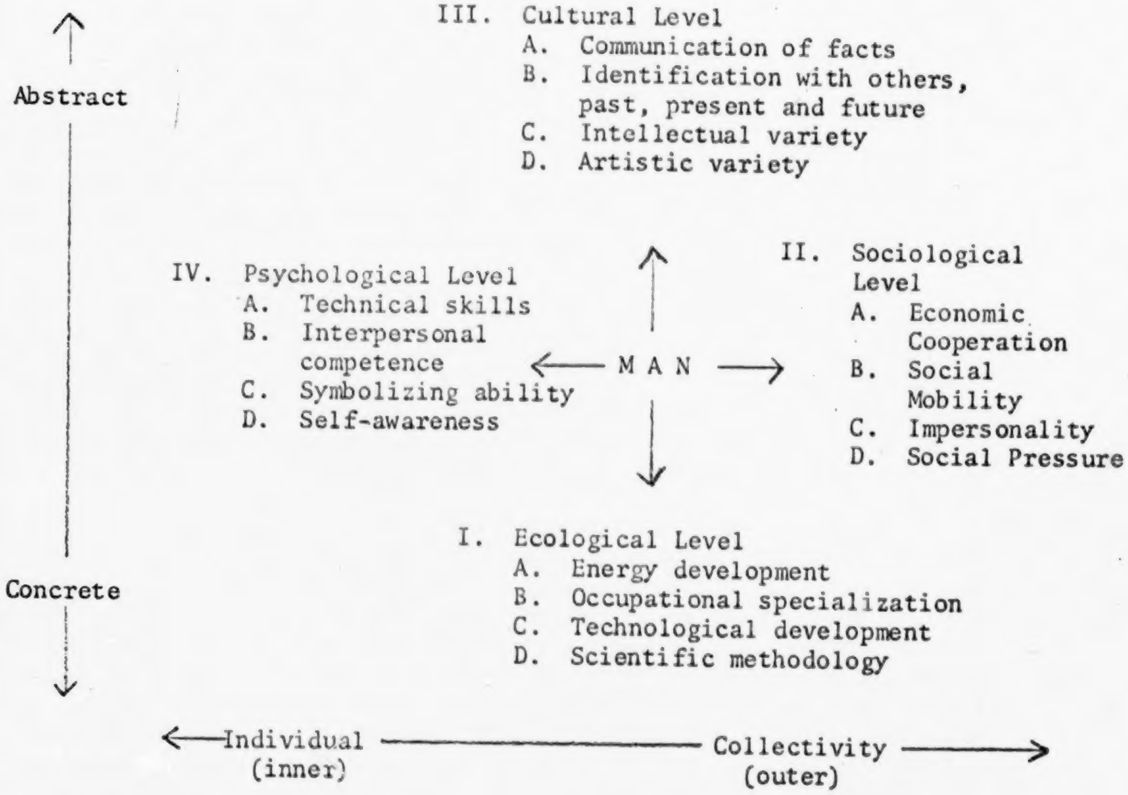
Large Scale--A man who has developed (or inherited) a large number of relationships so that he is less dependent upon any one of them may be described as large scale. An example of large scale is right here at hand. Here is a group of people with graduate degrees, belonging to professional societies with international memberships, having ideas drawn from all corners of the modern world and cultural forms traced back to Greek and Roman models. The range of this audience's physical, social, and cultural relationships is broad, not only in dimensions of space but in time as well; and, as a result, they are less dependent upon any single one. This audience is hypothesized to be large scale.

In the final report this audience will be contrasted with a couple of small scale Appalachian neighborhoods--Lavalette and Darnell Road.

Again, for an understanding of scale constructs, this paper assumes a reading of the presentation made last year, but to facilitate relating indices to constructs a schematic diagram will be included here.

SCALE: A Heuristic Model

The following is Dr. O. Norman Simpkins' two-dimensional scheme of scale. Note that each correlate is interrelated with the others and note also that each "A" corresponds with "I". Each "B" corresponds with "II", each "C" with "III", and each "D" with "IV".



III. Cultural Level
  A. Communication of facts
  B. Identification with others, past, present and future
  C. Intellectual variety
  D. Artistic variety

IV. Psychological Level
  A. Technical skills
  B. Interpersonal competence
  C. Symbolizing ability
  D. Self-awareness

II. Sociological Level
  A. Economic Cooperation
  B. Social Mobility
  C. Impersonality
  D. Social Pressure

I. Ecological Level
  A. Energy development
  B. Occupational specialization
  C. Technological development
  D. Scientific methodology

Toward Developing Indices of the Four Dimensions of Scal

Ultimately it is hoped that measures for each of the sixteen correlates of scale can be evolved, but in this first effort only gross contrasts between small scale and large scale will be sought and single indicators standing for ecological, social and cultural dimensions. Number of trips per month to Huntington stands for the ecological dimension--degree of mastery over the physical environment, particularly geographical. Number of persons with whom one generally interacts in a week (family, friends, neighbors, business). This score stands for social alternatives. Number of books, other than novels, read in a year was chosen to stand for variety of ideas-the cultural alternatives open to the individual.

These scores all reflect individual scale and cumulatively show differences in scale between neighborhoods. The neighborhood as a decision-making entity (when structure for this decision-making exists) will provide dimensions of scale indicating its sense of autonomy plus relatedness to its physical, social, and cultural environment. For the moment, however, the individual clues must suffice. The items presently available for indices under each of the four dimensions of scale are as follows:

Questions and Items Related to the Four Dimensions of Scale

Dimensions of Scale	Questions	Item Test
I. Ecological (Technology)--Control of the material environment. Because man is a biologically earthbound creature, he must be provided food, shelter, clothing. Measures of this will indicate extent of alternatives.	1 (B) 3 (D) 4 (D) 5 (A)	Trips to Huntington per month.
II. Autonomy among others. People must develop methods of getting along with other people. Patterns of relationship are needed and autonomy in the choice of interaction patterns. Measures here indicate the alternatives open to the individual for interaction.	6 (D) 7 (D) 8 (C) 9 (C) 10 (C) 11 (B) 12 (B) 15 (B) 16 (A)	Number of persons with whom interacted last week.
III. Variety of ideas. Man must be exposed to a range of symbolic ideas. Measures indicate this range.	10 (B) - 3 (B) 15 (C) 16 (A) 17 (A) 18 (A)	Books read last year.
IV. Autonomy of the self. Individuals must learn to live with themselves. Measures indicate degree of autonomy as opposed to fatalistic or magical thinking.	1 (A) 1 (C) 19 (D) 20 (D)- 32 (D) plus Simpkins' magicality scale.	High fatalism and magicality taken to be inversely related to personal autonomy.

Neighborhood Baseline Data: Baseline data has been gathered on Darnell Road and at this time of writing is coming in from Lavalette, West Virginia (two small scale neighborhoods near Huntington). Little use can be made of this data until program inputs have been made. We plan subsequently to report on this. For the moment it is possible only to show some clues as we contrast the two neighborhoods and do a little contrasting of groups characterized by high personal autonomy versus low.

Darnell Road is a working class bedroom neighborhood just outside Huntington city limits. Mountaineers for Rural Progress[3] are carrying on a limited neighborhood development program. Cabell County Neighborhood Development has a well respected worker. Extension has started 4-H and other agencies are particularly ready to focus as need arises there. Darnell Road is viewed as particularly left out of the mainstream of Huntington development. It is seen as low scale.

Lavalette is represented on Wayne County Economic Development Board but has had no separate inputs or OEO help since it is a middle and lower middle class bedroom neighborhood with few in the poverty class. There are, however, a majority of local residents typical of rural Wayne County except that some factors have brought a fair development to this neighborhood. Its proximity to Huntington (8 miles) may be a factor in growth. In any event it is on the verge of becoming a community and is generally viewed as larger scale than rural Wayne County on the whole.

Scale Comparisons Between Darnell Road and Lavalette: A few indicators were chosen for comparison in the social and cultural dimensions. The data presented in simple tally charts is about as one would expect of the neighborhoods as described.

Technological Dimension: Darnell Road residents, despite more working class status and lower average incomes, do not seem to differ much from Lavalette with regard to access to technology--number of cars, standard of living items in the home and the like. In the sociological dimension, however, Lavalette people seem larger in scale. They feel at home in more social gatherings both locally and in the county.

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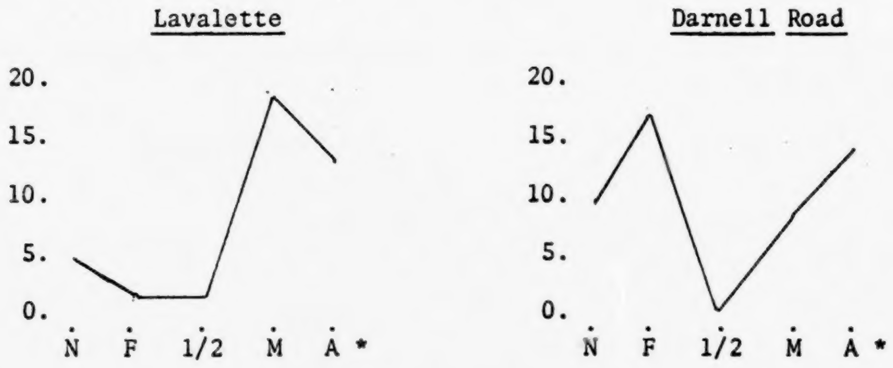
[3] A local organization of representatives from helping agencies in the multi-counties around Huntington.

Figure 3 Frequency Distributions: Q. 11

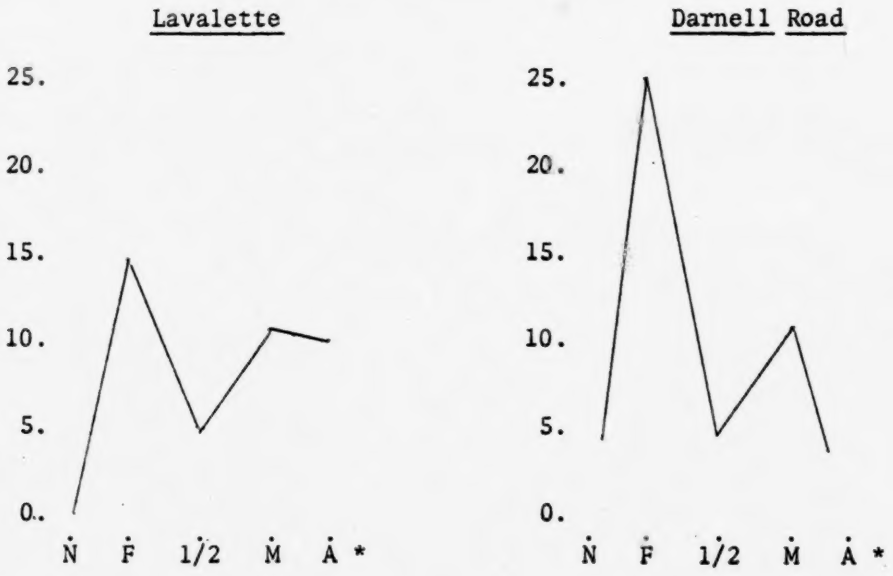
"In how many social gatherings ... in your community would you feel at home?"


Lavalette

Darnell Road

Figure 4 Frequency Distributions: Q. 13

"In how many social gatherings in your county would you feel at home?"


Lavalette

Darnell Road

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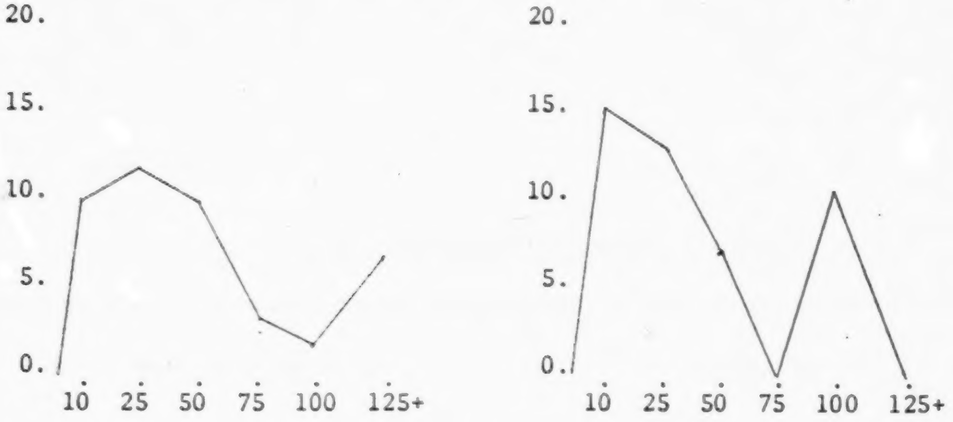
* N - None
F - Few
1/2 - Half
M - Most
A - All

Social Dimensions: The larger range of interaction possibilities is reflected also in the somewhat larger number of people with whom Lavalette people talk during an average week.

Figure 5 Frequency Distribution: Q. 10

"Not counting your family, how many different people do you talk to during an average week?"



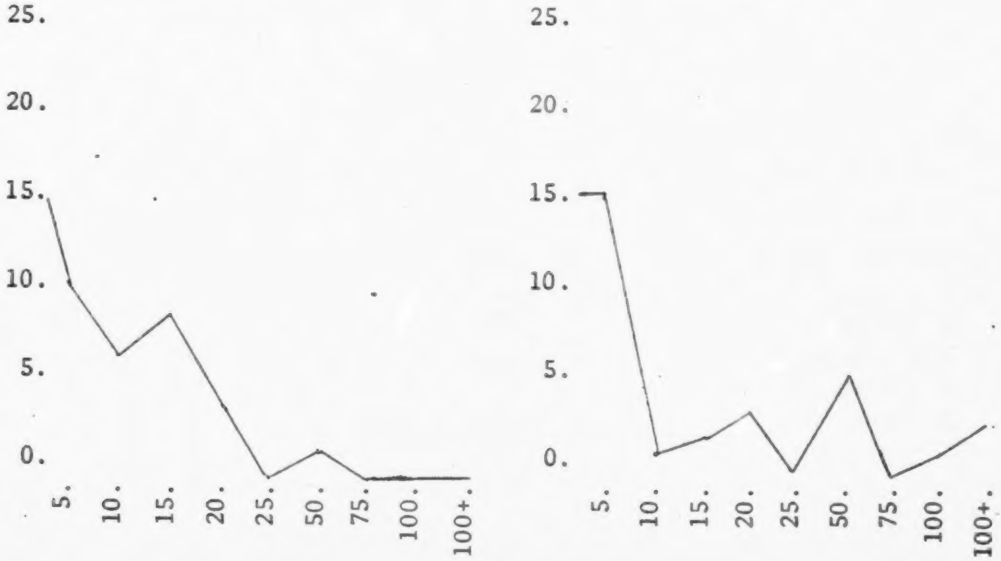
Lavalette

Darnell Road

Cultural Dimension: The cultural or variety of ideas dimension--the number of non-fiction books read per year is used to stand for this variable.

Figure 6 Frequency Distribution: Q. 15

"How many books have you read in the past year?"



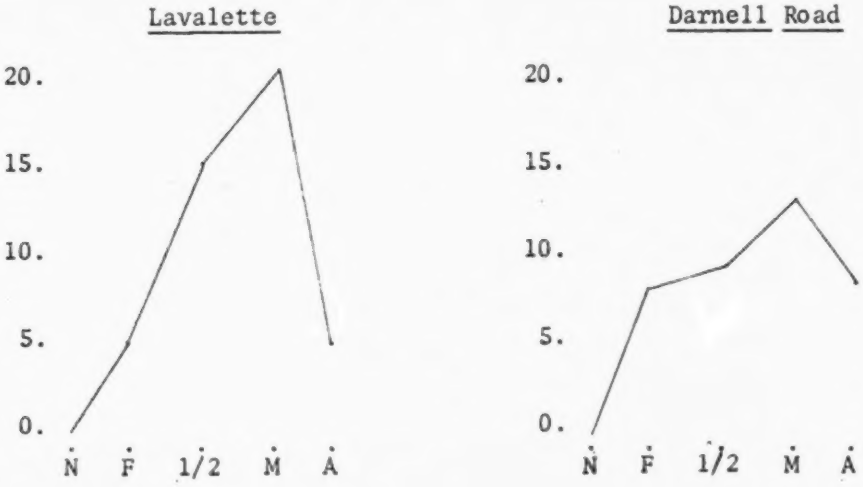
Lavalette

Darnell Road

Personal Autonomy: It seems a common rural characteristic and certainly Hillbillie to believe that "I am just as good as the next guy." The question: "How many people in this community are on the same level as you are?" was aimed at the persons feelings about his relative status. The question proved difficult for some respondents and inexperienced student interviewers. Lavalette residents felt that most of the community was on the same level. Darnell Road must have a small "elite" which feels that "few" are on the same level.

Figure 7 Frequency Distribution: Q. 18

"How many people in this community are on the same level as you are?"


Lavalette

Darnell Road

Some large logical leaps are involved here but greater personal autonomy is assumed when the more egalitarian view is held, when a less fatalistic stance toward life is accepted and when the magicality score is low.[4]

Further reflection of personal autonomy is taken to be the nature of churches and sects attended--Holiness and sect-type churches being more associated with fatalistic attitudes giving God all the initiative in affairs and leaving little sense of autonomy to the individual. The more institutionalized denominations such as Methodists and city-type Baptists characterized by middle class values and associated with middle class personal values. Generally church membership itself is a middle class value. This is reflected in Lavalette's greater proportion of church affiliation.

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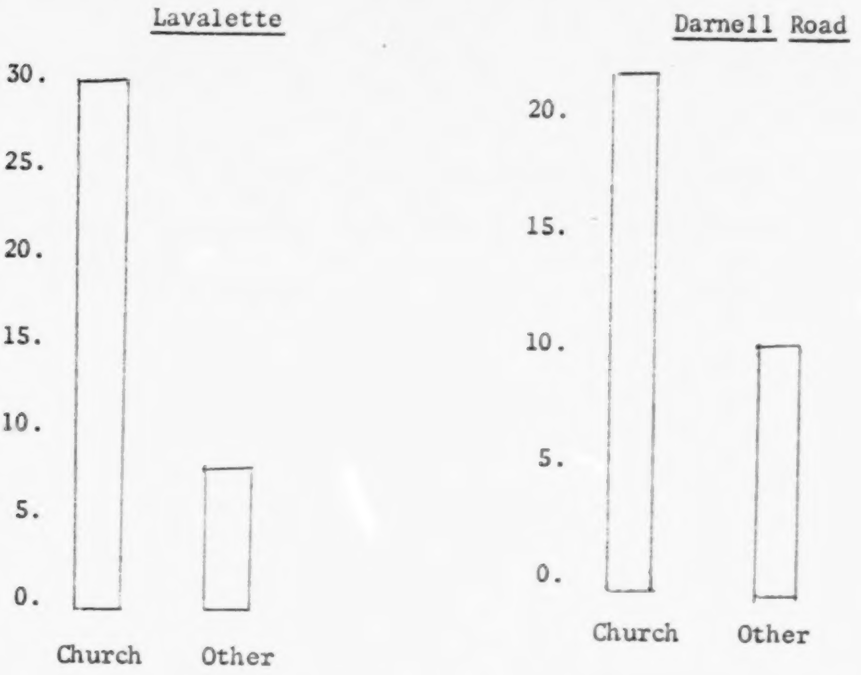
[4] Magicality score available only in the Darnell Road data.

Figure 8 Frequency Distribution: Q. 9

"What organizations such as church, etc., do you belong to?"



Variation in Scale Dimensions by High and Low Personal Autonomy: Viewing fatalism to personal autonomy as a continuum (see Question 20 - Question 32), fourteen highest autonomy scores were contrasted with fourteen lowest autonomy scores (Figure 9) to see if the other dimensions of scale would vary in the expected directions.

Figure 9 - Ecological, Social, and Cultural Alternatives by High and Low Personal Autonomy. Lavalette Neighborhood, Wayne County, West Virginia, February 1973.

IV Personal Autonomy	N	I Ecological Alternatives	II Social Alternatives	III Variety of Ideas
High	14	22	65	28
Low	14	10	48	8

I. Trips to Huntington per month

II. Number of persons with whom interaction takes place during the week

III. Number of books read in the past year

IV. Low fatalism scores are allowed to stand for high personal autonomy.

Summary and Conclusions

Scale as the range and intensity of relationship is defined under four rubrics treating man's relationship (1) to the material, (2) to relevant others, (3) to variety of ideas, and (4) to his inner self. Under these headings sixteen correlates are conceptualized. Indices of only four are suggested and used to illustrate contrast between two neighborhoods--one small scale and one of a slightly larger scale. The differences in scale dimensions tend in the expected directions. Scale is hypothesized as meaningful in several neighborhood development areas:

1. Scale provides baseline data in the form of measures of personal autonomy, ecologico-fitness, social options, and variety of ideas.

2. Scale provides criteria for balance in program development. Assuming growth in scale (expanded options) to be good development so long as it stops short of "over choice."

3. Scale provides criteria for program evaluation which are both tangible, intangible and consonant with the integrity of the decision-making entity.

4. Scale theory, in contrast to other holistic neighborhood development theory, does not usurp the autonomy of the decision-making entity. It enhances democracy and blends with extension "felt need" program evolution and provides for "inside-out" or ethnographic description.

5. Scale provides a systematic basis for research. When program inputs are provided with adequate controls, real learning can take place rather than an ad hoc array of impressions and goodhearted attempts (my impression of the essential research results of the massive OEO socio-economic expenditures).

After inputs in Darnell Road and Lavalette, the emphasis of which is the increase of scale, there will be a real possibility of longitudinal studies giving more precise program bench marks not only regarding things (a conventional measure), but regarding ideas, persons, and "relevant others"--hopefully a more accurate look at the whole neighborhood.

The Impact of Industrial Development on the Farm Enterprise*

Thomas J. Durant, Jr.**

Industrial development[1] has emerged as one of the most widespread and pervasive social phenomena in America. Industrial decentralization and expansion has represented an increasing and continuous trend. It seems therefore, that rural areas inevitably and increasingly will become the site of large industrial developments. During the past several decades many rural-agricultural areas have become the site of large industrial establishments. This has prompted several investigations of the impact of industrial development on rural society, its institutions and its people. Such rural industrial developments have been studied as a chemical corporation in Utah (1); a furniture factory in Mississippi (2); a box company in Louisiana (3); an aluminum plant and a chemical plant in Ohio (4); a brick plant in South Carolina (5); a shirt plant in Arkansas (6); a machine corporation in Iowa (7); and a steel corporation in Illinois (8). The location of such industrial establishments as these in primarily rural-agricultural areas has undoubtedly produced many changes in the social and economic organization of rural society. More specifically this development has produced changes in the farm enterprise system and in the structure and composition of the agricultural labor force resulting in a greater economic diversification of the aricultural economy.

Problem

What changes have taken place in the agricultural labor force which were generated by industrial development? Is industrial development producing changes in the organization of the farm as an agricultural enterprise? If so, what are the type, rate and magnitude of these changes? How is industrial development changing the relationship of man to his land in a farm enterprise system and what type of systems transformation of land, labor and capital are produced as a result of industrial development? In order to secure answers to these questions and more detailed aspects of the farm enterprise[2] and agricultural labor, an industrializing rural-agricultural area was studied. The objective of this paper is to present some of the more important findings of this investigation.

In 1968 a large steel corporation developed a major production complex in the Hennepin area which is largely a rural-agricultural area of Putnam County, Illinois. The construction of the plant got under way in the spring

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[1] Sometimes termed as industrialization.

[2] A farm enterprise is defined as a socioeconomic production unit which has and exercises the power to commit a given parcel of land to one or another productive purposes and decides the allocation of labor and capital on the land to achieve certain ends. See A. L. Stinchcombe, American Journal of Sociology, 67, 1961-62, pp. 165-176.

of 1965 and was completed in 1968. The initial phases of construction and operation have been completed and a large number of individuals have been employed. This development provided an opportunity to institute a longitudinal study of the impact of sudden and rapid industrialization on a rural-agricultural area. The construction and operation of the steel plant was incorporated into the study as a "natural experiment." It was anticipated that this emergence of a large commercial-industrial complex in a predominantly rural-agricultural area would result in measurable changes in the structure of the farm enterprise.

Theoretical Framework

Three major components were synthesized into one comprehensive theoretical framework which is thought to be appropriate for studying the problem of industrial development and the farm enterprise. These components are: 1) eco-system, 2) social system, and 3) social change. The rural social system is comprised of three interrelated sub-systems: 1) farm, 2) family, and 3) community.

The importance of the eco-system concept to our framework is that the ecosystem sets the limits within which a given social system operates. It defines the scope and character of a social system environment. Settlement and competition for space, the establishment of boundaries, and physical features are major aspects of the eco-system in addition to the four basic elements of population, organization, environment, and technology.

All social systems operate in a given eco-system or in a given environment. Industrial development is a major process operating in the rural society which affects the social structure of the farm, family and community sub-systems. The changes in the relationships among these sub-systems as produced by industrial development may create the need for adaptation in any given subsystem. In this instance, we are concerned with changes in the structure of the farm enterprise as generated by industrial development.

We take the view that social change should represent an explicit component of the eco-system-social system framework. Industrial development is considered as a major change process occurring in rural society producing certain linkages among the defined subsystems. Industrial development may produce a greater specialization of function, with its accompanying differentiation of structure, integration into larger social systems, and create the need for adaptation to a more economically diversified economy (9). With reference to our problem, a clarity in perspective on the change which the farm enterprise in specific and the agricultural labor force in general are undergoing can be achieved through the use of this synthesized framework.

Methods

Selection and description of experimental and control areas - The methodological objective was to conduct a quasi-experimental study with "experimental" and "control" regions and before and after measurements. The Hennepin region which was the site of the Jones-Laughlin Steel Corporation was designated as the experimental area. A second primarily rural-agricultural region of similar economic, demographic, and ecological characteristics to those of the experimental area was selected, but where no large industrial developments were either planned, in operation or under construction. This area was designated as the Watseka control area. Both areas were of equiproximity to a metropolitan center and selected basically due to their predominantly rural-agricultural character.

Data Source and Collection - The data were collected from a multi-county area in northeast Illinois. Data were secured through a longitudinal data collection survey of households in both experimental and control areas. The data were collected by use of the personal interview technique at two points in time, 1966 and 1971, resulting in two independent cross-section samples. The respondents were members of the agricultural labor force and farm operator head of households each constituting a separate sample.

Sampling method and procedure - Two subsamples were taken from a larger area probability sample which employed weighted sampling ratios. The first sample was comprised of household heads who were members of the agricultural labor force. The second sample was composed strickly of household heads who operated farms.[3] The agricultural labor force sample for Hennepin was comprised of 85 in 1966 and 54 in 1971 as compared to 47 and 57 in Watseka respectively. The farm enterprises consisted of 150 in 1966 and 54 in 1971 for Hennepin and 69 and 57 respectively for Watseka.

Stages of the Analysis[*] -

I. Descriptive analysis of agricultural labor forces of experimental and control areas.

II. Analysis of changes and differences in the structure of the farm enterprise of both areas.

III. Multiple regression of relationships between personal, family, and community - integration variables characterizing the household head and structural dimensions of the farm enterprise. It was assumed that these relationships were influenced by the presence or absence of industrial development. The main question addressed here was what happens to the relationship between farm operator characteristics and the structure of the farm enterprise when industrial development takes place. This was accomplished through the use of multiple regression where estimations of a model having the general form of $Y = a + bX_1 + bX_2 + bX_3$ was performed; where X_1 = personal variables of head; X_2 = family variables of head; and X_3 = community integration indicators of the head. Thus, we were interested in predicting the amount of change in the structure of the farm enterprise from the personal, family, and community integration variables of the household head as well as how these relationships changed over a five-year period.

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[3] A farm is operationally defined as the ownership or rental of less than 10 acres of land and the sale of at least $250 worth of farm produce annually or ownership of 10 acres or more and the annual sales of at least $50. Definition used by Census of Agriculture, 1964.

[*] The third stage of the analysis has not yet been completed and will not be reported in full.

Dependent and Independent Variables -
Structural dimensions of dependent variable (farm enterprise).

1. Farm size - total number of acres owned.
2. Acreage rental - number of acres rented or worked for others.
3. Land value - estimated value of land per acre.
4. Net acres - total number of acres owned and rented from others minus the number of acres rented out to others.

Independent variables.

Personal variables

1. age - age at last birthday.
2. education - exact number of years of school completed.
3. income - earned income from salary and wages.

Family variable

1. family size - number of persons in household.

Community - integration variable

1. organizational membership - total number of organizations to which head belongs.

The Agricultural Labor Force

In general, the data showed that there was not a wide difference in the agricultural labor forces of Hennepin and Watseka in 1966. This was expected since the experimental and control areas were matched on rural-agricultural characteristics at the beginning of the study and the effects of the industrial development had not set in. After a period of five years there was only a small amount of difference in the agricultural labor forces of the two areas. These were, however, some specific changes which suggested that industrial development had produced some change in the agricultural labor force. Hennepin, the site of the industrial development showed a slightly greater tendency toward the change of part-time farmers and farm laborers to non-farm industrial-related jobs. It was evident also that in both areas, Hennepin and Watseka, those who started out as farmers in 1966 were more than likely to remain as farmers in 1971. It was also evident that the control area remained a more heavily concentrated farming area than did Hennepin.

The average age increased in both Hennepin and Watseka, but the increase was slightly greater in Watseka. The analysis suggested a trend toward a slightly older agricultural labor force in both areas. However, the Watseka labor force appeared to have aged at a faster rate on the average than that of Hennepin. This might be an expected outcome since studies have shown that industrial development in rural areas can serve to stabilize the age distribution by providing employment for young working-age adults. The mean age went from 46.7 to 51.0 in Watseka and from 49.9 to 52.6 in Hennepin over the five-year period.

There was not a significant difference in mean years of school attained for the two areas. The mean number of school years completed was about 10 years for both Hennepin and Watseka for both 1966 and 1971. This may suggest that industrial development has little affect on the educational level of an area as a whole. The mean age in Hennepin was 52.6 in Hennepin in 1971. At this age most individuals were probably not increasing their educational level. This may have off-set any increase in educational level on the part of the younger age groups.

Average number of acres owned in Hennepin in 1966 was much higher than for Watseka - 149 acres and 81 acres respectively. By 1971, however, mean acres owned in Hennepin had decreased slightly to 135 acres. This may have been due to a change in land status from ownership to rental as will be shown later. At the same time mean acres owned in Watseka increased from 81 acres to 137 acres. The results of a cross tabulation showed that most respondents of the agricultural labor force owned between zero and 100 acres of land in 1966 - 44% in Hennepin and 42 percent in Watseka. The next largest category in Hennepin was the 100 to 499 acre group which comprised slightly more than 40 percent of the respondents. The next largest category in Watseka was the 50 to 99 acre group which comprised 30 percent of the respondents. Also indicated was that some of the labor force participants of both areas did not own any land while others owned land which they apparently rented out or used as residential sites. The increase in mean acres rented out in Hennepin from 1966 to 1971 while total acres rented out decreased suggests that more land was rented out in 1971 on the average than in 1966.

More land was rented from or worked for others on the average in Watseka than in Hennepin in both 1966 and 1971. Change in mean acres rented from others over the five-year period of the study showed that mean acres rented from others increased in Hennepin but decreased slightly in Watseka. The extremely high and extremely low cases of acres owned, acres rented out, and acres rented from others, however, may have obscured the overall acreage distribution in both Hennepin and Watseka.

Mean income of household heads increased slightly in Hennepin over the five-year period while that of Watseka decreased slightly for the same period. Mean income to begin with in 1966, however, was higher in Watseka than in Hennepin. But by 1971, Hennepin led in mean income by a $500 margin over Watseka. The same general pattern was followed with reference to family income of the two areas. The higher increase in mean income in Hennepin suggests that the industrial plant may have produced a positive influence on income level in the area.

The data also revealed that respondents of the two areas received next to no income from welfare or social security. This seems to be somewhat typical of rural people as a whole. Only a small amount of income was received from nonfarm sources; however, income from nonfarm sources as well as mean additional income of heads were higher in Hennepin than in Watseka. The Watseka area seemed to have relied more on the farm as the major source of income than in the case of Hennepin.

Another indicator to show that Watseka relied more heavily on the farm than Hennepin is that in 1965 all members of the Watseka sample produced at least some crops as compared to 90 percent of the Hennepin sample. Hennepin, on the other hand, showed a slightly greater tendency to produce livestock than Watseka, especially beef cattle. Hog production, however was the main type of livestock production in both Hennepin and Watseka. Apparently hog production was more suitable for the system of production of the areas. There was only a very small amount of poultry production or dairying in either area. Gross receipts from the farm were similar for Hennepin and Watseka.

The Hennepin respondents estimated their land to be valued higher per acre than did the Watseka respondents in 1966. The 1971 estimates, however, revealed that the Hennepin respondents were somewhat over-optimistic in their estimates.

In 1971 Hennepin nor Watseka utilized much outside labor such as seasonal hands, farm hands, renters or tenants. Hennepin, however, utilized slightly more seasonal farm hands and renters than did Watseka. Watseka utilized slightly more tenants.

The Farm Enterprise

It was clear that farming in Hennepin (site of the industrial steel corporation) was on the decline. Total number of farms decreased by 64 percent in Hennepin between 1966 and 1971. At the same time total number of farm acres decreased from 27,352 acres in 1966 to 5,133 acres in 1971. Contrary to expectations average size of farms decreased in Hennepin between 1966 and 1971. It seems that the mean size of farm decreased at the expense of the reduction of total acres owned in the area and suggests further that more and more farm land was being converted to other uses.

In the Watseka control area total number of farms decreased by only 17 percent from 1966 to 1971. Farm size in Watseka increased as did total acres of farm land. Farming as an enterprise was much more stable as a whole in Watseka than in Hennepin over the five-year period.

Mean net acres increased substantially in both Hennepin and Watseka but the increase was much greater in Watseka. This indicates that although some land in both Hennepin and Watseka was owned and some rented from others combined, this was much less true in Watseka.

In sum, the three points of interest were revealed with reference to the farm enterprise. First, average acres owned in the industrialized area was higher than that of the control in 1966 and 1971. Second, more acres on the average were rented from others in the industrialized experimental area than in the control area. And third, there was a change toward renting out fewer acres to others in Hennepin than in the control area. These factors were borne out by the fact that mean acres rented from others were higher in Hennepin in both 1966 and 1971 than in the Watseka control area.

In addition, mean acres rented to others decreased in Hennepin between 1966 and 1971 but increased slightly in Watseka.

According to estimates made by the household heads,land value increased substantially in both Hennepin and Watseka from 1961 to 1966 and again from 1966 to 1971. However, land value estimates were higher in Hennepin in 1961 and 1966, but were higher in Watseka in 1971. Apparently other factors in addition to industrial development are associated with increase in land values.

Just as in the case of the agricultural labor force both Hennepin and Watseka the farm enterprises produced mostly crops with relatively little livestock. Similarly there was a slightly greater tendency toward beef production in Hennepin. There were at least some prosperous farm enterprises in both areas. Thus annual gross receipts from the sale of farm produce did not differ appreciably.

Only 15 farmers of a total 150 (15 percent) in Hennepin were part-time farmers in 1966. In 1971 only five or nine percent of the total 54 farmers were part-time farmers. Most individuals were inclined toward either being in or out of farming. There was no support for the expectation that part-time farming was increasing in the industrializing area.

There was a greater proportion of farm owners in Watseka than in Hennepin in both 1966 and 1971. Farm ownership proportion-wise increased slightly in Watseka between 1966 and 1971, but remained about the same proportion in Hennepin. Although the proportion of tenancy to total farmers was much less in Watseka than in Hennepin, the rate of increase was about the same.

The data on labor source suggested that most of the farms of Hennepin and Watseka supplied most of their own labor. Hennepin farmers, however, utilized seasonal hands to a greater extent than any other type of labor. Farm hands was the next highest category but still utilized only to a small extent. Seasonal hands represented the largest labor category in Watseka but was used to a much lesser degree than in Hennepin. In sum, non-farm or outside labor was not very popular in either Hennepin or Watseka.

Although the third stage of the analysis has not yet been completed a preliminary review of portions of the data showed that personal, family and community-integration variables did have some influence on the structure of the farm enterprise and that some of these relationships seems to have been influenced at least in part by industrial development. The difference in the relationships between these variables and the structure of the farm enterprise of the experimental and control areas did not differ widely. There were, however, some specific differences between the two areas when the personal, family and community-integration were related to each structural dimension of the farm enterprise. Age and income seemed to have been the strongest prediction of type and change of farm enterprise structure. Education was of little importance while family size and organizational membership were of only moderate importance. It is possible that industrial development produced a greater affect on the age and income relationships to farm enterprise structure that in the case of the other variables. This was at least the preliminary indications.

Summary

From this investigation and analysis, what specific conclusions can we reach concerning the impact of industrial development on the farm enterprise and the agricultural labor force. The following statements summarize the findings of the study, as well as showing what the data suggest concerning the impact of industrial development:

1. Industrial development may produce a decrease in total number of farms in rural areas. Rate of decrease may be accelerated. Total acres of farm land owned also decreased.

2. Industrial development may produce a decrease in farm size rather than the expected increase if a large proportion of land in the area is either rented out to others or rented from others. For those in the non-rental category size of farm may increase as indicated by a panel sample of farm enterprise household heads.

3. Net acres of farm land operated will increase in industrializing especially if a large number of acres are being rented.

4. Land value will increase substantially in industrializing rural areas.

5. Part-time farming may decrease in industrializing rural areas as a result of part-time farmers taking non-farm or industrial related jobs.

6. Industrial development did not significantly alter the major source of farm labor (operator) or the type of production (crop production). A trend was suggested, however, toward more beef and hog production which are mor labor saving and capital intensive.

7. Rural industrializing areas will depend less and less on farming as a full-time or part-time occupation than lesser industrialized areas. Rate of change will be more rapid in the former.

8. Age and income were the more significant factors associated with structural changes in the farm enterprise in the industrial area.

9. The above summary statements were generally true for the agricultural labor force with only minor variations.

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PROGRAMS FOR RURAL DEVELOPMENT:

A Comparative Study of Three Mississippi Multicounty Centers*

S. K. Reddy**

The rapid changes in rural and urban areas in recent years have focused attention on rural development resulting in the Rural Development Act of 1972. The action was stimulated by the growing concern of scientists, specialists, and leadership to discourage migration of rural population to ever growing metropolitan centers causing severe stress and strain on metropolitan resources. The reasons attributed to the movement from rural to urban areas were: displacement of farm labor due to the rapid farm mechanization, lack of opportunity for gainful employment, lack of adequate housing, and other services in rural areas. People left their rural homesteads because the urban areas appeared to provide greater opportunity for employment and more and better services. Solution of these problems is contingent upon the efforts to make rural communities better places in which to live and work. This is sought to be achieved through rural development.

The President's task force stated that the purpose of rural development "is to create job opportunities, community services, a better quality of living, and an improved social and physical environment in the small cities, towns, villages, and farm communities in rural America."[1] In order for nonmetropolitan areas to compete in providing jobs and services, comprehensive and continuing efforts involving many groups, both voluntary and governmental, are essential.

If the rural development programs are to be effective, there is an urgent need for research on problems specific to individual communities and the nature and type of programs that are currently initiated by various communities. The purpose of this paper is to identify the problems faced by three rural communities in Mississippi and to identify and analyze the nature of development programs.

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*The study reported here is a part of the research project, "Institutional Structures for Improving Rural Community Services."

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Paper presented in the "Rural Sociology" section of the Association of Southern Agricultural Workers meeting, Feb. 4-7, 1972, at Atlanta, Georgia, USA.

[1] U. S. President's Task Force on Rural Development. "A New Life for the Country: The Report of the President's Task Force on Rural Development." Washington, D. C., Government Printing Office, 1970.

Data Collection

The data were collected from three nonmetropolitan multicounty centers, located in three distinct geographic regions of Mississippi. These were Oakville[1] (North Mississippi); Dayton (South Mississippi); and Farmington (Mississippi Delta). Each of the centers was between 20,000 and 25,000 in population and present a broad range of development programs and problems.

The major analytical and data collecting concepts used were (1)actions or programs, (2) associations, organizations, and groups, and (3) actors, community participants or leaders. Studies and conceptualizations following interactional or "action" conception of community had been done previously by others concerned with this study.[2]

The first step in the field work was ennumeration of community programs and organizations. This was accomplished in three distinct ways. (1) The researchers personally interviewed in each community eight to ten key informants and community knowledgeables such as mayor, aldermen, presidents and secretaries of Chamber of Commerce, newspaper editors, and agency directors to elicit information on major programs, actors, and associations participating in each program. (2) A one-page field instrument called "Survey of Programs, Organizations, and Problems" schedule was used with various civic groups in the community such as Rotary, Lions, Civitan, Kiwanis, and Exchange Clubs. (3) Two other schedules were also used on leaders and key informants. One secured the usual background information, data on formal participation and community support index. The second schedule dealt with participant involvement in each of the actions in which he was associated.

Community programs were also ennumerated by scanning local newspapers. This method supplemented the information obtained from the above methods.

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[1] The names of three communities are pseudonyms.

[2] Kaufman, Harold F., and Wilkinson, Kenneth P., "Community Structure and Leadership." An Interactional perspective in the study of community. Mississippi State University, Social Science Research Center, Bulletin 13, June, 1967. Also see Kaufman, Harold F., "Toward an Interactional Conception of Community," Social Forces, Vol. 38 (Oct., 1959).

Background of Study Communities

Selected demographic characters of the three communities are presented in Table 1.

Table 1. Selected Demographic Characteristics of Study Communities.*

		Oakville	Dayton	Farmington
1.	% non-whites	17.6	51.0	54.6
2.	Median Income	8,436	6,331	5,864
3.	% Families with Income less than poverty level	12.5	31.4	31.2
4.	Civilian Labor Force	1.9	5.6	6.3
5.	Nonworker/Worker Ratio	1.29	1.79	1.89
6.	Median School years completed (per 25 years)	12.3	11.2	10.2

*Source: 1970 Census.

Oakville has moved in the last 10 years from primarily a farm based economy to an industrial economy. The displaced farm labor has been successfully absorbed in the local industrial plants. The economy of Farmington has been largely dependent on cotton. Mechanization of cotton farming operations had resulted in large scale displacement of farm labor. The unfavorable attitude of local leadership to industrialization during the 1950's coupled with the inability of displaced labor to find employment locally resulted in the migration of displaced farm labor to more industrialized areas.

An important factor in the three communities is the proportion of nonwhites comprising mostly of black population. While they form 17 percent of the total population in Oakville, proportion of blacks in Dayton and Farmington is slightly above fifty percent.

Median income is lowest in Farmington, followed by Dayton and Oakville. Median income of Oakville is far above the level of median income of State of Mississippi which is $6071. Also one third of the total number of families in Dayton and Farmington have incomes of less than poverty level.

Unemployment figures of Dayton and Farmington are also high, with 5.6 percent of civilian labor force in Dayton and 6.2 percent in Farmington unemployed, compared to 1.9 in Oakville. Non-worker to worker ratio is 1.29 in Oakville compared to 1.79 in Dayton and 1.89 in Farmington.

Median school years completed by population over 25 years of age is higher in Oakville compared to that of Dayton and Farmington.

Problems Facing the Community

Data on problems facing the community were obtained from members of various civic clubs in the three communities. A one-page field instrument called "Survey of Programs, Organizations, and Problems" schedule was used with various civic groups such as Rotary, Lions, Civitan, Kiwanis, and Exchange clubs. The number of respondents were 50 in Oakville, 88 in Dayton, and 120 in Farmington.

The responses of Civic Club members about the problems facing the community were analyzed. The number and type of problems identified in each of the three communities are presented below.

Community	No. of Problems Identified	No. of Problems Mentioned 3 or More Times
Oakville	20	10
Dayton	20	13
Farmington	26	14

The problems faced by the three communities are somewhat different depending on the community's background and level of development. The major problems facing each community are presented in Table 2.

Table 2. Major Problems Facing the Community.

Oakville	Dayton	Farmington
Improvement of Traffic	Lack of Transportation (Air, Rail, and Road)	Education & school Integration
Highways	Improvement of Streets	Unemployment
Housing	Lack of Industrial Growth	Lack of Industry

(Cont'd.)

Oakville	Dayton	Farmington
Improvement of air-rail transport	Lack of Leadership and Community Attitude	Drugs and Juvenile Crime
Improvement of Streets	Lack of Recreational Facilities	Poor Housing
Development of Quality Education	Lack of Proper Housing	Lack of Good Community Relations
Drugs Among Teenagers	Lack of Cooperation Among Races	Race Relations
Downtown Deterioration	Juvenile Delinquency	Untrained Labor Force
Labor Shortage	Economic Stagnation	Downtown Development
Pollution and Ecological Improvement	Education and School Integration	Lack of Recreational Facilities
	Sewage Disposal	Lack of Health Facilities
	Lack of Finances for City Development	Street Improvement
	High Taxes	Low Income Level
		Economic Development

A closer examination of problems faced by each of the communities shows that the problems faced by Oakville can be termed as "second generation" problems resulting from industrial development such as labor shortage; need for better paid jobs rather than "any jobs"; environmental pollution; need for better rail and air transport; highways to link with bigger industrial and commercial centers; speedier movement of traffic within the community; improvement in the quality of education and environment.

The problems faced by Dayton and Farmington seemed to be more basic relating to lack of industry, unemployment, lack of leadership, problems of race relations, lack of public facilities and services relating to health, housing, and recreation.

The problem of education as seen by respondents in three communities is again different. While the problem in Oakville and Dayton is that of creating facilities for higher education and improving the quality of education, the problem in Farmington is that of adjusting to the changed circumstances of integrated schools. The problems of Farmington are to be judged against the population composition (where nearly 50 percent are blacks) and modernized farming systems resulting in large scale displacement of farm labor which is unlettered and unskilled for industrial employment.

Development Programs

Data on development programs in the community during the preceding five years were obtained by interviewing in each community eight to ten key informants such as the mayor, aldermen, presidents and secretaries of Chamber of Commerce, newspaper editors, agency directors, and other leaders in the community. Information on programs was also obtained by scanning local newspapers and from the interviews with civic groups mentioned earlier.

A number of development programs were identified in each of the three communities. These are classified according to the major interest area served by the program and are shown in Table 3.

Table 3. Development Programs in Three Communities Classified By Interest Areas.

Interest Area	Oakville	Dayton	Farmington
Community Wide	7	3	6
Public Facilities	7	12	3
Ag. & Natural Resources	3	-	-
Industry, Trade, & Services	8	4	3
Education	7	3	3
Health	4	3	3
Welfare	5	3	3
Housing & Urban Renewal	1	2	2
Recreation & Arts	8	5	4
Total	50	35	27

Specific programs in each of the three communities are shown in Table 4. Dayton and Farmington had at least two or more programs in each interest area except natural resources and rural life. Oakville had two or more programs in each interest area. Rural development had been of special concern in Oakville. Rural Development Council of Oak County was sponsored by Oakville Community Development Association to take care of rural development programs.

Oakville has much greater volume of activity and community participation as will be shown elsewhere in this paper. Also programs are more comprehensive and have been in existence at least during the last two years and there is a general concensus about their favorable impact on the community. Industrial development has been the major concern during the last 15 years with improvement of education, health, and the arts now being the main concern,

The emphasis in Dayton is on industrial and trade promotion. A highly important action in Dayton has been that of revitalization of Chamber of Commerce and its development of strong cooperative relations with the city and county governments. This single action has set in motion a number of programs and actions in the community, in which the Chamber of Commerce, city and county governments, and other local organizations participate.

The main emphasis in Farmington, like Dayton, is on programs concerned with industrial and trade promotion and employment. The key action in Farmington had been change in the form and structure of city government. The city has recently reorganized its government to have a full-time mayor and competent men to run its various departments. This action has brought in new leadership committed to industrialization and growth of community. The effect of this action was the establishment of closer links between various organizations in the community and creation of grassroot climate for development of the community.

Table 4. Classification of Programs by Interest Areas.

Oakville	Dayton	Farmington
	Community Wide	
Community Development Association Association of Gov'ts. Mayor's Advisory Council CDA-Promotion Committee City Beautification Commission Day Care Center	Revitalization of C of C Part. of Blacks in Decision-Making Bodies Community Relations Comm.	Coordination Between City-County Gov'ts. Change in Charter & Form of City Gov't. Economic Development District Chamber of Commerce Bi-Racial Committee County Unit System of Government
	Public Facilities and Services	
Highway Committee-CDA Transportation Comm. (CDA) Highways-Our Pressing Emergency Airport Committee (CDA) Expansion of City Services Road Project & By-Pass City Planning Comm. Law Enforcement	Planning Commission Anti-Litter Committee (C of C) Port Development Convention Dev. Comm. (C of C) Transportation Comm. (C of C) Civil Defense Street Improvement Prog. Civic Center Airport Committee New Jail Master Plan Slum Clearance	City Planning Comm. Civil Defense Sewage Plant
	Natural Resources & Rural Life	
Rural Development Council Tri-River Planning Commission Water Management Comm.		
	Industry, Trade, & Services	
Industrial Park Finance Committee Industrial Park Operation Retail Trade Council (CDA)	Commercial Development Comm. Dayton Business & Civic League Community Mart, Inc. Industrial Foundation	Industrial Foundation Retail Steering Comm. Downtown Development

Oakville	Dayton	Farmington
	Industry, Trade, & Services (Cont'd.)	
Industrial Committee (CDA) Industrial Development Committee (CDA) Uptown Merchants Association Community Relations Asso. Industry Placement Committee (CDA)		
	Education	
Community Service & Continuing Education Juvenile Prevention Center Educational Planning Program Oak County Child Develp. Council Oak County Library Follow Through Program Voc.-Education Jr. College	4-year Degree Granting College-Dayton Dayton County-City School Board Private School/School Reorganization	Formation of Private School/School Integration Farmington Jr. College Vocational Training
	Health	
Regional Medical Center/ Comprehensive Health Plan Mental Health Asso. Regional Rehabilitation Center Alcohol Safety Action Program	Hospital Construction and Expansion Comprehensive Health Program Fluoridation of Water	Hospital Expansion Mental Health Clinic Drug Program/ Education
	Welfare	
Jobs for Blacks United Companions Junior Auxilliary United Neighbors Oakville Comm. Action Agency Comm. of Concern-Civic Improvement Club	Dayton Community Action Agency Headstart STAR	Council for Farm Workers Farmington Community Action Agency
	Housing	
Urban Renewal Housing	Housing Urban Renewal	Housing Urban Renewal

Oakville	Dayton	Farmington
	Recreation & Arts	
Community Theatre	Tourism Comm. of C of C	Community Concert Association
Park & Recreation Commission	Preservation & Restoration of Historic Sites	Recreational River Project
Community Concert Series	City Beautification Commission	Community Parks
Community Symphony Orchestra	Pilgrimage Club	Miss Farmington Pageant
Cultural Programs Comm. (CDA)	Town & Country Garden Club	
Community Chorus		
Country Club		
Junior Olympics		

Sponsorship of development programs

Type of sponsorship of development programs is an indicator of community support and strength. Program sponsorship in the three communities is examined from the point of whether the programs are sponsored by voluntary organizations (nongovernmental sources) or governmental sources. The data is presented in Table 5.

Table 5. Development Programs Classified by Source of Sponsorship and Interest Area.

Interest Area	Government			Non-Government		
	Oakville	Dayton	Farmington	Oakville	Dayton	Farmington
1	2	1	2	4	2	2
2	4	8	4	4	4	0
3	2	0	0	1	0	0
4	0	1	1	9	4	2
5	6	2	2	1	1	1
6	4	3	2	0	0	1
7	1	4	2	3	0	1
8	1	2	2	0	0	0
9	1	2	0	7	4	4
All Prog.	21	23	16	29	15	11

It was observed that 58 percent of all the programs were sponsored by nongovernmental agencies in Oakville, while the corresponding figure was 43 percent for Dayton and 40 percent for Farmington. This indicates greater involvement of voluntary organizations in the development process in Oakville compared to the other two communities. Conversely governments have been the sponsors of majority of programs in the two communities of Dayton and Farmington. Nongovernmental sponsorship of developmental programs in these two communities were mostly in the areas of industrial and trade development.

Differences were also observed between the three communities regarding sponsorship and coordination of various development programs by the voluntary organizations. The most important voluntary organizations concerned with development programs in each of these communities are the local Chambers of Commerce. These are in effect the community coordinating structures.

In Oakville the local Chamber of Commerce is called The Community Development Association* (CDA) which is comprehensive in terms of program sponsorship. The programs sponsored by CDA range from those related to industrial and trade promotion to rural development, development of health, education, and arts, and cultural activities. As such it has a distinct style of sponsorship and coordination. An analysis of the development programs in Oakville indicates three distinct styles of sponsorship. in the first instance CDA creates a committee or sponsors a separate agency and continues to give support to the new agency. In a second approach CDA sponsors a program directly and then stimulates it to become an autonomous agency. Yet in a third approach CDA encourages its members to take part in initial organizational efforts of new programs which are not directly supported and sponsored by CDA. Each of these styles of sponsorship are important in the coordination of development programs in the community.

The style of coordination followed by Chamber of Commerce in Dayton is through a system of committees and task forces. The committees and task forces serve as rallying points for coordinating the efforts of various individuals, groups, and organizations in the community. Once the objective has been obtained the task forces are dissolved.

The style of coordination followed by the Chamber of Commerce in Farmington is primarily through a system of committees. The operation of Chamber of Commerce in Farmington is mainly geared to programs directly related to industrial and trade promotion. In view of the limited scope of programs sponsored by the Chamber of Commerce in Farmington, coordination through the committees seems to meet the needs of the situation.

The nature of sponsorship and coordination noted in the three communities indicates that each community has to develop its own methods of sponsorship and coordination depending on the comprehensiveness of programs it sponsors.

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*This is a pseudonym.

Community Participation in Programs

Development programs succeed to the extent people participate in them directly, or indirectly through their leaders. A sense of participation is essential not only from a tangible consideration of program success but from the more important consideration of developing a feeling of community among the members. Participation is essential if the programs are to be geared to the needs of the community.

Two dimensions of community participation considered in this section are (1) the scope of participation as measured by the members of interest areas in which respondents participated, and (2) the volume or extent of participation as measured by the number of programs in which respondents participated. The extent of participation is important from the point of broad based participation in development programs.

The researchers selected in each community six to eight key informants such as the mayor, the aldermen, presidents and secretaries of Chamber of Commerce, agency directors, bankers, etc., to elicit information about major programs and participants in those programs. These interviews yielded additional names of respondents. These were interviewed to get a better picture of the programs, individual participants, and their role. New names of individuals found in these interviews were added to the original list. Judgement on the completeness of information on a program was made when no additional names and information were forthcoming. Thus a total of 71 respondents in Oakville, 96 in Dayton, and 71 in Farmington were interviewed.

Each of the respondents was asked to identify generalized leaders in the community. From this information the number of times each individual was named as leader was computed. These are termed as reputational mentions. The individuals receiving more than average number of reputational mentions were considered as leaders.

The data on community participation in programs is presented in Table 6. It was observed that participation of respondents, as well as leaders, in Oakville was much higher both in scope and extent compared to Dayton and Farmington. This perhaps is a factor in the better coordination of programs observed in Oakville. (See Table 6 on next page.)

Table 6. Extent of Participation of Leaders & Others in Development Programs.

	Oakville	Dayton	Farmington
No. of Respondents	71	96	71
No. of Leaders	21	19	26
No. of Programs	50	35	27
No. of Interest Areas	9	8	8
Av. No. of Actions per Interest Areas	5.5	4.3	3.3
Av. No. of Programs per Respondent	4.8	2.7	2.7
Av. No. of Interest Areas per Respondent	3.8	2.0	2.1
Av. No. of Programs per Leader	9.3	5.7	4.4
Av. No. of Interest Areas per Leader	5.1	4.0	3.4

The common core of leadership in a community participating in programs across the interest areas seems to be an important factor in the coordinative efforts in a community.

Summary

A number of development programs have been identified in the three study communities; 50 in Oakville, 35 in Dayton, and 27 in Farmington. At least one program was identified in each of the interest areas in all three communities. However, number of programs and number of participants observed in the three communities indicated greater volume of development activity and wider participation of community in Oakville compared to Dayton and Farmington. Programs in Oakville are more comprehensive and most of them have been in existence for at least three years. Most of the programs, in Dayton and Farmington, are of recent origin whose impact is yet to be felt.

Nongovernment, voluntary agencies are the sponsors of majority of development programs in Oakville while local governments sponsored majority of development programs in Dayton and Farmington.

The most important agency for coordinating development programs in all the three communities is the local Chambers of Commerce. While the Chamber of Commerce in Oakville is comprehensive to include various interests, Chambers of Commerce in Dayton and Farmington are less comprehensive, mainly oriented towards development of trade and industry.

The elaborate system of program sponsorship and support to various organizations extended by the Development Association in Oakville has been at the base of comprehensive, well coordinated and integrated programs found in Oakville. The sponsorship and support to other programs and agencies by the Chambers of Commerce in Dayton and Farmington have been less comprehensive.

In all the three communities strong cooperative relationships exist between the local Chambers of Commerce, the city and county governments. This relationship has been successfully utilized in Oakville to coordinate and integrate development efforts. In Dayton and Farmington there is a great deal of scope to utilize this relationship as an instrument for integrated development efforts.

The observations noted above are to be viewed against the background of each community. Oakville had obvious advantages like low proportion of nonwhite population, better resources and leadership. The problems of Dayton and Farmington are those of very high proportion of nonwhites, background of racial tension, low resource base due to incidence of unemployment and high proportion of families with incomes below poverty level. The recent developments in the two communities indicate a trend towards greater awareness and need for development. Various actions taken by these two communities to reorganize their institutions, to industrialize, and to develop physical and social resources have created a grassroot climate favorable to development.

For those concerned with rural development like planners, social scientists, and change agents, these three communities offer both a challenge and an opportunity to understand the social context in which development takes place. The observations pertaining to Oakville indicate that good communities are not gifts of benevolent governments or made possible by the abundance of resources, but it is the willingness of people and their leaders to face challenges and create for themselves what they need.

There are several factors like leadership structure, strategy of program development, style of action (autonomous or coordinated), relationship between community organizations, etc., that need to be taken into account in explaining the success of development programs in some communities and failure in others. Scope of this paper does not permit such elaboration. Future research in rural development must try to address itself to urgent questions like: How can rural community institutions be helped to be more vigorous? What makes a rural community a viable growing center while another declines or at best remains static?

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THE ROLE OF COMMUNITY DEVELOPMENT IN RURAL DEVELOPMENT*

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ABSTRACT

Community development is defined as an interdisciplinary social sciences profession with the major functions being the land-grant triumvirate of teaching, research, and extension. The type of curriculum and other training needed for producing community development professionals is outlined. Finally the type of interdisciplinary management system for coordinating the research, teaching, and extension functions is briefly explored.

Introduction

Although community development is not synonymous with the concept of rural development, community development is the major focus essential to the development of rural areas and therefore should be considered the central and major focus in rural development. Rural development, as defined by USDA for research funding, is broader than community development as defined below but their definition agrees that the major priority areas of work are those which change the social cultural context to create employment, improve community services and facilities delivery to rural areas, improve family and other group relationships, and generally improve the quality of life in rural areas.

The position that community development is the major focus needed in rural development is supported by the fact that most of the major problems in rural America are rooted in systemic maladjustments in the social structure, processes, and institutions of American society. A mere cataloging of a few of the major problem areas will suffice to illustrate the point: 1) the lack of employment opportunities reflected in high unemployment and underemployment rates and low incomes illustrates the need for systemic and cultural changes in the economic sector to correct the problems, 2) the high incidence of substandard housing (reaching as high as 50% in some rural areas) illustrates that the institutional systems for housing are not able to do the job, 3) the low levels of educational achievement as well as the disadvantaged educational facilities and services are now recognized as being rooted in other community and family maladjustments as much as in the school systems themselves, and 4) the inability to deliver health services that are quantitatively or qualitatively adequate at a price which most families can pay illustrates the need to question the structural and goal-setting procedures of the existing health system.

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These are but a few of the rural problems that illustrate the need for systemic and cultural change, which require community development as the central focus for any rural development program with even a minimal chance of success.

Most persons attempting to define community development have erred by giving it narrower definitions and specialization than the totality with which it must be involved. Until Americans stop oversimplifying the nature of their problems and applying band aids to problems needing cultural surgery, we cannot hope to solve our major social, economic and cultural crises.

Multi and Interdisciplinary Nature of Community Development

The social sciences are the primary disciplines involved in community development and within the social sciences the major focus is placed on sociology, social psychology, economics, and political science. Of these, sociology has traditionally taken the lead in the functions of teaching, research, and extension for community analysis and development. The teaching, research, and extension work of early rural sociologists, and of those today, has focused on sociology, but rural sociologists have always taught and researched phenomena of all social sciences according to the nature of the problem which they are attacking.

The physical and biological sciences and professional fields such as education, philosophy, medicine and the humanities, are all secondary disciplines or professions in the field of community development. These secondary disciplines should be brought into the process of development as needed and usually perform a technical or expert role when the problem being analyzed involves their particular expertise.

The Multi Function Nature of Community Development

As with most program areas in the land-grant colleges there are three major functions in community development; these are teaching, research, and extension.

The role of teaching in rural community development is to give a fundamental understanding of American society and particularly the rural sector of American society.

Community development teaching should familiarize all students with the cultural institutions which the organizational structures are charged with operating for the benefit of the total community and society. Each institution, such as the institution of marriage within the family organization and the two party political institution within government, prescribes values, goals and normative behavior patterns, such as monogamy and registration for voting in primaries.

The function of research in community development is to refine and extend the knowledge about the functioning of community and other social systems as organizational and cultural systems in society. Most sociologists traditionally distinguish between two types of research: basic and applied. Some sciences consider the two as incompatible and not complementary. In the case of rural sociology, and particularly community development, the two types of research are more apt to be classified as complementary rather than conflicting because the problems attacked require an applied orientation be taken; however, the interest and orientation of many scientists is toward the theoretical and basic social science problem that lies behind the applied problem. Indeed, one of the dangers in the applied orientation of land-grant research is that the researchers are often not required to be theoretically oriented to basic problems; consequently, they may research a symptom rather than a real problem. It therefore can be argued that land-grant research should always have both a basic and an applied orientation. Basic research is required to define how social systems and cultural institutions actually function in order that applied research may be done to determine corrective measures and changes. Often basic and applied research can both be done in the same research project. In some cases the only way the basic research can be accomplished may be within the context of applied research. For example, funding may not be available for the basic but would be for the applied research and, in addition, obtaining data for the basic might be difficult, were it not in the context of working on an applied problem. Thus the role of basic research in community development is to define both the nature of the problem and the social cultural contest in which the problem exists. Applied research then suggests and tests alternative hypotheses for solutions to those problems.

The role of extension in community development is to utilize scientific and professional knowledge to help the social systems and communities make the social and cultural changes necessary for solving problems such as poverty and community services delivery. Basic to a good extension community development program is an effective public affairs education program. Public affairs education must usually take place in the contest of working with the clientele in an attempt to solve the problems as they see them. In the process of working with them it may be necessary to help them redefine the nature of the problem and of the social context in which it exists. Once the problem is adequately defined and understood there is the additional task of helping the leadership and public to appropriately organize to bring about the social change required to reach the goals and objectives that they have in mind. This kind of programming requires the best of guidance in the social action, program planning, and implementation processes. The professional expertise required necessitates that community development be a self-contained program area receiving the same degree of merit and support as agriculture, home economics, and 4-H in the traditional land-grant teaching, research, and extension system. Furthermore, the program area of community development must be administered and led in policy and program by persons trained for community development. Until this is recognized and implemented, the field of community development will be hampered and relatively ineffective compared to what it must be to do the job.

Training for Community Development

The training for community development should be in an interdisciplinary, social science curriculum and multi-function program for teaching, research, and extension.

The community development professional must be educated and trained as as interdisciplinary social scientist with a fundamental knowledge in relevant areas of sociology, economics, political science, anthropology, and social psychology. In addition to qualifying as a good interdisciplinary social scientist with an adequate understanding of the total society and culture, each community development professional needs several types of specialty knowledge. One area of specialty is that of formal organizations. This expertise is critical since all communities are made up of and structured by the interaction network of its formal organizations and agencies which typically systemically extend to the state and federal levels. Fundamental to an adequate understanding of formal organizations is an understanding of the general functions performed by each such organization. Several of these functions are organizational maintenance, systemic linkage, institutionalization, social control, social change, socialization, institution maintenance, and differentiation or specialization. Another area of expertise essential for the professional community development worker is expertise in leadership development in formal organizations. Since courses and training in such leadership are rarely provided as a part of the regular university curriculum, in most cases it will be necessary to see that adequate training and courses are added on existing programs. In such courses the understanding and skills necessary for carrying out the leadership functions in any organization should be taught. [1] Other specialty courses would include courses in state and local government, comparative government systems, community analysis, demography and population analysis and family. Also recommended are interdisciplinary community development seminars, and seminars on the organizational, procedural, and philosophical principles for community development.

Skills needed for research would be those gained through participation in existing research projects and through courses in research methodology, computer technology and statistics courses in addition to fundamental social science courses.

Extension community development professionals should possess skill and knowledge in working within small groups and formal organizations and on a more general level an understanding of the motivation and functioning of people in diverse social groupings. They need the skills and ability to make objective group, organizational, and community analyses while involved in the action. Other essentials for community development extension specialists are the roles of public affairs educator and specialist in program and community planning.

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[1] See for example, David G. Bowers and Stanley E. Seashore, "Predicting Organizational Effectiveness with a Four-Factor Theory of Leadership," Administrative Science Quarterly, September 1966; and Christine S. Tennant and James W. Longest, Professional and Paraprofessional Role Differentiation, Maryland Experiment Station, M.P. 821, College Park, Maryland, January, 1973.

The Management System for Community Development

A management system for community development should provide an interdisciplinary coordinating and programming unit for research, teaching, and extension programs in community development. Personnel involved in this management system would not be pulled ou of the discipline departments but, rather, would have an appointment in a discipline department and also be a member of the management system unit for community development. Departments which function for the advancement and development of each of the disciplines are essential to the development of specialized knowledge. On the other hand, such departments are inadequate for integrating the knowledge of those disciplines into an interdisciplinary and multi-function teaching, extension, and research program for community development. A separate but interrelated structural unit must be established for management of the community development program and preparation of persons for doing community development work. The structure for the development of each discipline is vertically-oriented to a specialty while the community development structure is horizontally-oriented across disciplines and must have the particular structuring components that are appropriate to the interdisciplinary and multi-disciplinary nature of its subject and methodology.

An interdisciplinary organization is needed to facilitate and reward the interdisciplinary team for goal oriented interaction, communications, and work facilitation and coordination in an atmosphere of mutual support and interests. The existing traditionally discipline-structured organization focuses upon rewarding contributions and interaction that are specialty-development oriented and therefore discourages behavior that is oriented toward interdisciplinary products. Discipline orientation also encourages cooperation within the discipline while promoting competition and even conflict between disciplines. The interdisciplinary structure must foster cooperation between and competition within disciplines, recognizing which members of each discipline can contribute most to reaching the interdisciplinary program goals. Generally the interdisciplinary units must focus on cooperative interaction; all competition should be focused on quantity and quality of product that contributes to goal achievement regardless of discipline contributions.

Community development programs also require coordination of research, extension, and teaching programs of an interdisciplinary nature. The existing discipline-oriented organization is preoccupied, and rightly so, with the coordination of those three functions within each of their disciplines and typically have little time, inclination, patience, or incentive for interdisciplinary activities. The interdisciplinary structure would have to focus upon the task of coordinating those functions in the "rough and ready" interdisciplinary environment as opposed to the same task in the relatively "cosy womb" of the discipline environment. Therefore, a special interdisciplinary structure must be established if interdisciplinary programs are to receive other than token support and attention. Such an interdisciplinary structure has been proposed as an institute or center at the University of Maryland. The proposal suggests that there be a relatively small coordinating structure of an interdisciplinary and multi-function nature which would function to assist in the coordination of the research, extension and teaching programs. There would then be a larger body of continuously involved faculty and staff in these programs. No one would be listed in such a central continuously involved staff who was not regularly involved in community development research or extension programs and/or teaching courses needed for training community development professionals. Staff involved only on a task or project basis in the programs would be attached temporarily to the center or institute and their major affiliation remain with the discipline department or agency of employment. The major objectives of such an institute or center include:

1. To provide a unit with responsibility for coordinating, planning and programming community development extension, research, and teaching programs.

2. To provide sufficient resources of personnel and programs to attract outside funding for the quantity and quality of programs required in the state.

3. To provide a unit for planning the long-range policy, staffing patterns, etc., to utilize the increased USDA funding for rural development research and extension.

4. To provide a unit which can provide a coherent and coordinated liaison with the other states and with the Regional Centers for Rural Development.

5. To provide a unit for developing cooperative and coordinated programming with federal, state, regional and local agencies in planning, staffing, funding and conducting community development research, extension, and teaching programs.

6. To provide a unit for planning and sponsoring training for graduate students, CRD Extension agents and other agency personnel working in community development research and extension.

We justify the proposal for such a management system on the fact that the problems of rural America cannot be solved by independent individual community, county or state efforts. A more systematic multi-unit coordinated approach is required. Rural social, cultural and economic systems which are capable of delivering the goods, services, and facilities essential in modern America must be constructed. Such an effort will require innovative approaches which build upon the many valid basic institutions of America and adapt other social and cultural traditions which in some respects are obsolete in today's technologically sophisticated and urbane society.

The land-grant system of research, extension and teaching applied to the development of American agriculture has given us a food and fiber industry unmatched anywhere in the world for quantity, quality and price. A similarly well organized and coordinated long-term research, extension, and teaching program is an approach, perhaps the only approach, which can make the greatest short-term contribution and also be capable of sustaining the continuous massive thrust that is required for the development and reconstruction of rural America.

PATTERNS OF ORGANIZATION OF RURAL WATER SYSTEMS IN MISSISSIPPI*

by

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Introduction

Public water systems in urban and suburban areas are so generally accepted that the vast majority of Americans simply assume that an adequate and safe supply of water is available. This is not the case though for citizens in the smaller towns and open country areas of rural America. According to reports from the Department of Agriculture, one-fifth of the population had no access to public water and sanitation systems, 33,000 communities with populations greater than 25 persons were without public water systems, and furthermore, in open country rural areas, public water systems were almost non-existent (Department of Agriculture, 1968, 1971).

Traditionally, private wells have served as the principal water source for many rural residents. The reliability of private wells has been reduced as urbanization, industrialization and commercial farming operations have overtaxed underground water supply, causing a lowering of local water tables in many areas. As a result, rural residents have been faced with the necessity and expense of deepening their wells, which often involves complicated procedures to bring up water from deeper depths. One solution to the increasing cost and ineffectiveness of private rural wells has been the development of a community water system serving all the residents of a given area. Thus, rural water systems have become of major importance in improving and maintaining quality of living for rural residents, especially the rural poor.

A 1970 report of the President's Task Force on Rural Development states, "We need more information on effective, low cost water delivery systems and sewage disposal in countryside areas and small towns" (President's Task Force on Rural Development, 1970:48). In light of the growing importance of rural water system development, this report deals with research on the organization of rural water systems in the state of Mississippi.

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Nature of the Problem

Purpose

The major aims of the research are to study patterns of the development of rural water systems in Mississippi and to examine major variables related to variability in rural water system development. Since Mississippi is one of the leading states in the development of rural water systems, a study based in Mississippi should be of maximum utility in planning rural water systems development throughout the nation and in particular the Southeast.

This paper deals with an analysis of data employed (1) to descriptively identify characteristics and patterns of rural water system development in Mississippi, and (2) to examine the effects of socioeconomic, demographic variables on patterns of rural water system development. This report is based upon preliminary results, and the findings suggested are tentative subject to completion of the comprehensive analysis.

Background

Up until 1965 when special legislative action opened the way for rapid expansion, the funding of rural community water and sewage systems was quite modest. During the latter half of the decade, rural water systems emerged as a viable solution to water problems in rural areas.

Programs for rural water systems are similar to those of rural electrification. The basic administrating agency is Farmers' Home Administration, Department of Agriculture, though a rural water system is a locally initiated and locally maintained operation. Since its creation, FHA has been the primary credit agency in the Department of Agriculture and, in addition, it maintains 1700 county offices to assist rural residents in securing low-interest loans for farm operation, purchases, and improvement. FHA provides farm management services, carries on loan programs for watershed improvement and community recreational facilities, and participates in other aspects of community planning and development.

Establishing a rural water system involves several steps. The first of these is for individuals interested in a rural water system to organize other interested parties into a nonprofit association, all of which must agree to use water from the cooperative system. Next, an engineer is secured to survey the area to ascertain the technological and economic aspects of the proposed system. Then, the association, if it meets the eligibility requirements, applies for a charter as a nonprofit organization. If the charter is granted, the association has construction plans prepared and submits an application for funding through FHA to cover the cost of establishing the system.

In addition to the private citizens involved in grassroots-level activity, a key individual in the establishment process is the FHA county supervisor whose role is to furnish information and advice to interested groups and to assist them in processing and securing loans after the group is organized. Unofficially, however, the supervisor through contacts and other efforts may stimulate interest among community residents and thus play a substantial part in the number of loan applications from his area.

FHA funding has been available primarily in the form of loans to be repaid within 40 years, with the maximum cost not to exceed $1,000 per family member. At one time, applications could also be made for grant funds to be used largely for planning purposes, but grants have been recently eliminated. As possibilities for expansion arise, applications for subsequent funding may be made either to expand the original system or to consolidate single systems into a multisystem.

Research Orientation

A review of literature indicates a general lack of research of direct relevance to this study. Although there is an established and growing body of social science literature dealing with social aspects of water resources development, the studies reviewed differ from this one in that (1) only one focuses specifically on rural water systems (see Peterson, 1971), (2) few study the complexity of variables underlying this research, and (3) few study locally initiated (grassroots level) water resources development.

Some researchers have expressed skepticism concerning the utility of deterministic approaches in social science based on the simple linking of cause to effect. A relatively new theoreticial approach, known as field theory, has been utilized in several instances as an alternative model of social organization to guide empirical research efforts of concrete practical problems such as those found in water resource development (Singh and Wilkinson, 1968; Wilkinson, 1969, 1970a, 1970b; Dasgupta, 1967).

The basic premise of the field approach is that social phenomena exist as a configuration of many interdependent forces and can only be understood through a treatment of variables at several levels (Singh and Wilkinson, 1968). Thus, parts of an action system influence each other serving as both cause and effect. It is within the field approach context that the underlying rationale for this study of developmental process as applies to rural water systems has emerged.

Operating interdependently within the social field are several types of variables which have effect on the ability of a community to organize rural water systems. These variables range from hydrological conditions and socioeconomic, demographic features of the social milieu to sociostructural factors such as nature and extent of community organization to the activities of agency representatives.

Hydrological and socioeconomic, demographic variables constitute a relatively stable background through time which either promotes or retards rural water system development. Community organization and agency contact variables, e.g., effectiveness of FHA supervisor, are more amenable to change operating within a favorable or unfavorable background.

Thus, hydrological and socioeconomic, demographic variables may impose basic limitations on the organization of rural water systems in a given area. For example, hydrological features within a given area such as depth of suitable water supply may prohibit establishment of systems. Or the limiting factors may be economic in nature such as the FHA economic feasibility requirement necessary for guaranty of a 40 year loan which requires evidence of a stable or rising population in an area and a sufficient number of committed families so the cost will not exceed $1,000 per family served. Explanation in situations where variation exists between areas with similar background characteristics may lie in variables relating to the social organization of the area, i.e., degree of community organization or behavior and/or attitudes of FHA supervisor.

In a study of the relation of level of community organization to development of rural water systems in selected Mississippi counties, Peterson (1971) found a positive relationship between degree of community leadership and participation and effectiveness in organizing rural water systems. Peterson, however, pointed up the importance of the role of the FHA supervisor to the organization of rural water systems suggesting that study at the agency level should perhaps take precedence over study of community organization and participation variables.

The actual organization of rural water systems is likely dependent on the interaction of all the variables above, though action of different variables are best observed at different stages or levels. While many variables may be operating to affect the organization of rural water systems in any county, and a multifactor approach identifying and including all relevant factors may be desirable, this study represents the first step in a systematic examination of these variables through its consideration of socioeconomic, demographic characteristics on a state-wide basis to identify differences in patterns of development resulting from an operation of these variables.

Research Methods

State-wide data representing the variables in the study of Mississippi rural water systems have been collected from two primary sources. Information on all rural water systems through July, 1972, came from records of the Community Services Branch of the Farmers' Home Administration. Other measures were extracted from county statistics available in 1970 Census sources.

To date, data have been used for two analytical purposes. One focus has been on the development of a descriptive profile of patterns and characteristics of Mississippi rural water systems concentrating primarily on indicators of size, trends over time, and racial composition of systems' members. Another aspect of analysis has concentrated on the association between selected socioeconomic, demographic variables and level of rural water system development with county as the unit of analysis. For the latter, data were arranged in contingency tables and Goodman's and Kruskal's Gamma (Champion, 1970) employed as the associational statistic. Measures of most of the variables are easily ascertained in the data presentations, but where needed, elaboration is given.

Development of Rural Water Systems in Mississippi

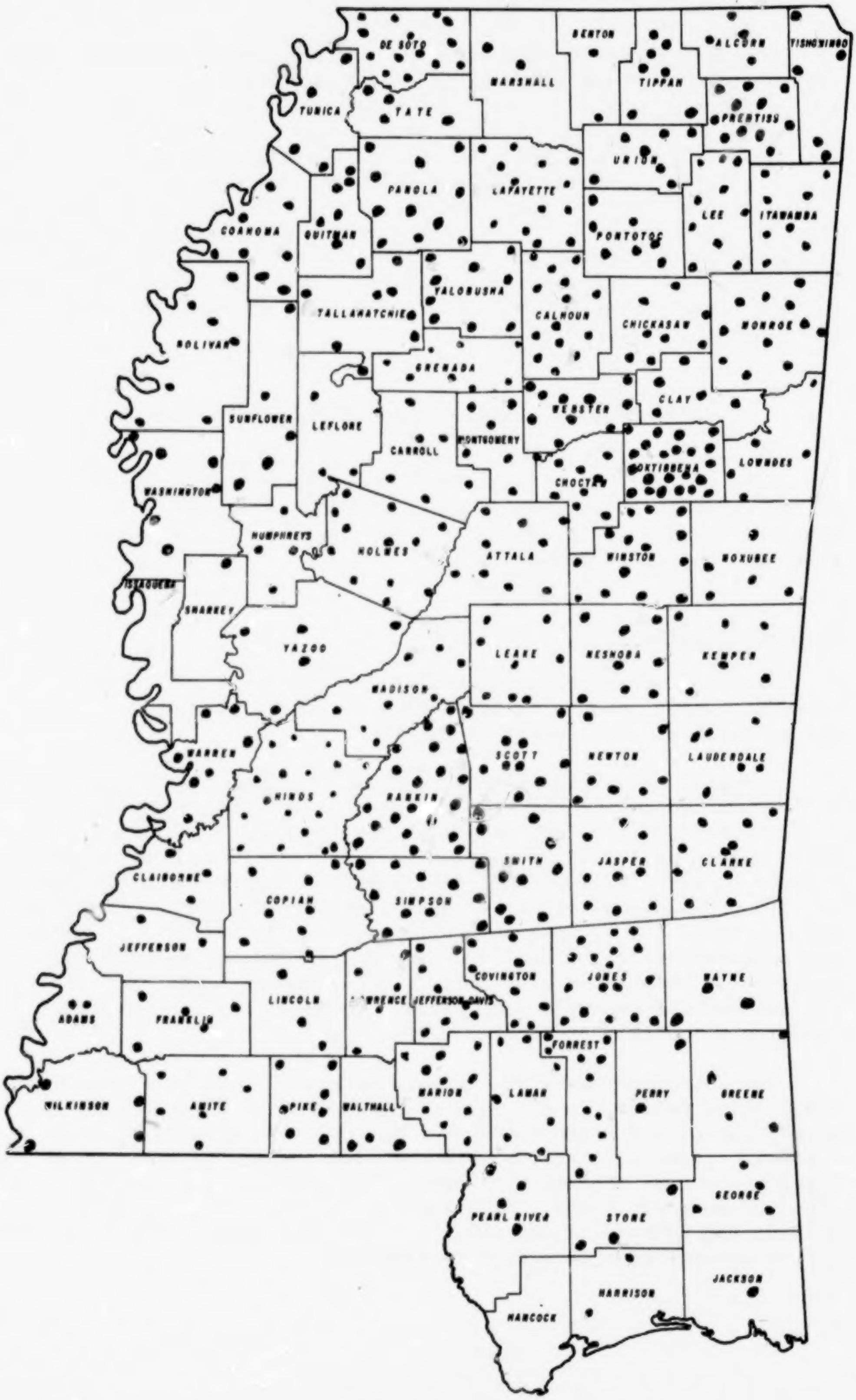
Data describing statewide rural water systems are presented in the first of two subsections below. Results of the analysis of data on the association between socioeconomic and demographic factors and level of rural water system development for Mississippi counties are found in the second subsection.

Descriptive Profile

Analysis of the data on each of Mississippi's 588 rural water systems reveals several notable characteristics, trends over time, and patterns of development around the state.

General. Mississippi's 588 systems in 80 of the 82 counties were organized during the decade beginning in 1962 (see Figure 1). Data obtained for systems organized through July, 1972, show that most systems at initial organization were relatively small with between 50 and 125 members. Mean number of current user families was 165, with number of users per system ranging from 10 to 2,814. One-fourth of the systems served more than 200 families; 58 percent had memberships of 100 families or more. Sixty-two systems had memberships which were all white in racial composition, and 14 systems had all nonwhite membership. In 64 of the systems, the nonwhite membership exceeded 70 percent.

The water systems' organizations received funding in excess of 119 million dollars in the form of 940 loans and 84 grants for establishment and often subsequent expansion or alteration of existing systems. Grant allocations were not given until two years after the first system was organized. Fourty-four counties with systems received no grant funds. Amount of the initial loans or grants varied from $910 to $1,083,000. Initial loan amounts for 10 percent of the systems were in excess of $300,000.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TIPPAH
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PRENTISS
UNION
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LAFAYETTE
LEE
ITAWAMBA
COAHOMA
QUITMAN
PONTOTOC
YALOBUSHA
TALLAHATCHIE
CALHOUN
CHICKASAW
MONROE
BOLIVAR
GRENADA
CLAY
SUNFLOWER
LEFLORE
WEBSTER
MONTGOMERY
CARROLL
OKTIBBEHA
LOWNDES
WASHINGTON
CHOCTAW
HUMPHREYS
HOLMES
ATTALA
WINSTON
NOXUBEE
ISSAQUENA
SHARKEY
YAZOO
LEAKE
NESHOBA
KEMPER
MADISON
WARREN
SCOTT
NEWTON
LAUDERDALE
HINDS
RANKIN
SMITH
JASPER
CLARKE
CLAIBORNE
COPIAH
SIMPSON
JEFFERSON
COVINGTON
JONES
WAYNE
ADAMS
FRANKLIN
LINCOLN
LAWRENCE
JEFFERSON DAVIS
FORREST
WILKINSON
AMITE
PIKE
WALTHALL
MARION
LAMAR
PERRY
GREENE
GEORGE
PEARL RIVER
STONE
HARRISON
HANCOCK
JACKSON

FIGURE 1. Location of Rural Water Systems in Mississippi

Trends, 1962-1972. Figure 2 shows the number of systems organized by year for the period 1962-1972. Relatively few systems were established from 1962-1964, until the enactment of the Poage-Aiken community facilities program in 1965 making funds available for rapid expansion of community water and sewage systems. The number of new systems established each year continued to rise through 1968, then dropped drastically in 1969 and leveled off. This likely reflects more fundings for reorganization, expansion, and even consolidation of existing systems.

Table 1 contains data which represent selected aspects of development for the decade. The data suggest that the later a system was organized, the larger the system in terms of both numbers of families served and size of the initial funding amounts. For example, between 1962-1965, only 15 systems were organized serving 200 or more families. But during 1970-1972, 65 such systems were organized. The average size of loans has increased as well. This may indicate that while there is a tendency toward funding larger systems, there may also be certain liabilities associated with funding smaller systems.

As for changes over time in the racial composition of the memberships, the data suggest few, if any, precise patterns. In 1964, the first all-white systems were organized as well as the first systems with nonwhite majority memberships. In 1965, the first all nonwhite system was funded.

Racial composition of membership by size of system is shown in Table 2. The percentage distributions reveal no tendency for larger systems to include more nonwhite members. In fact, some of the largest systems had all-white memberships. On the other hand, there was a tendency for all nonwhite systems to be smaller than mixed or all-white systems.

Development patterns in the state. All but two of the state's 82 counties had one or more rural water system. The number of systems ranged from zero in the coastal county of Hancock and in the Mississippi Delta County of Issaquena to 22 in the north-central county of Oktibbeha. In order to ascertain if a regional pattern of development existed, number of systems was used as an indicator of level of rural water system development, and three levels were established. Counties having 0-4 systems were classified as low, 5-8 as medium, 9-22 as high. Figure 3 is a map showing the counties by level of development. The solid shadings depict the two higher levels of development. The distribution of systems around the state suggests that there are clearly distinguishable differences in the degree of organization of rural water systems from region to region, with regional variations perhaps coinciding with regional socioeconomic and demographic differences.

By comparing the distribution patterns of rural water systems with previously established socioeconomic delineations of the state,

FIGURE 2. Number of Rural Water Systems Funded
1962-1972

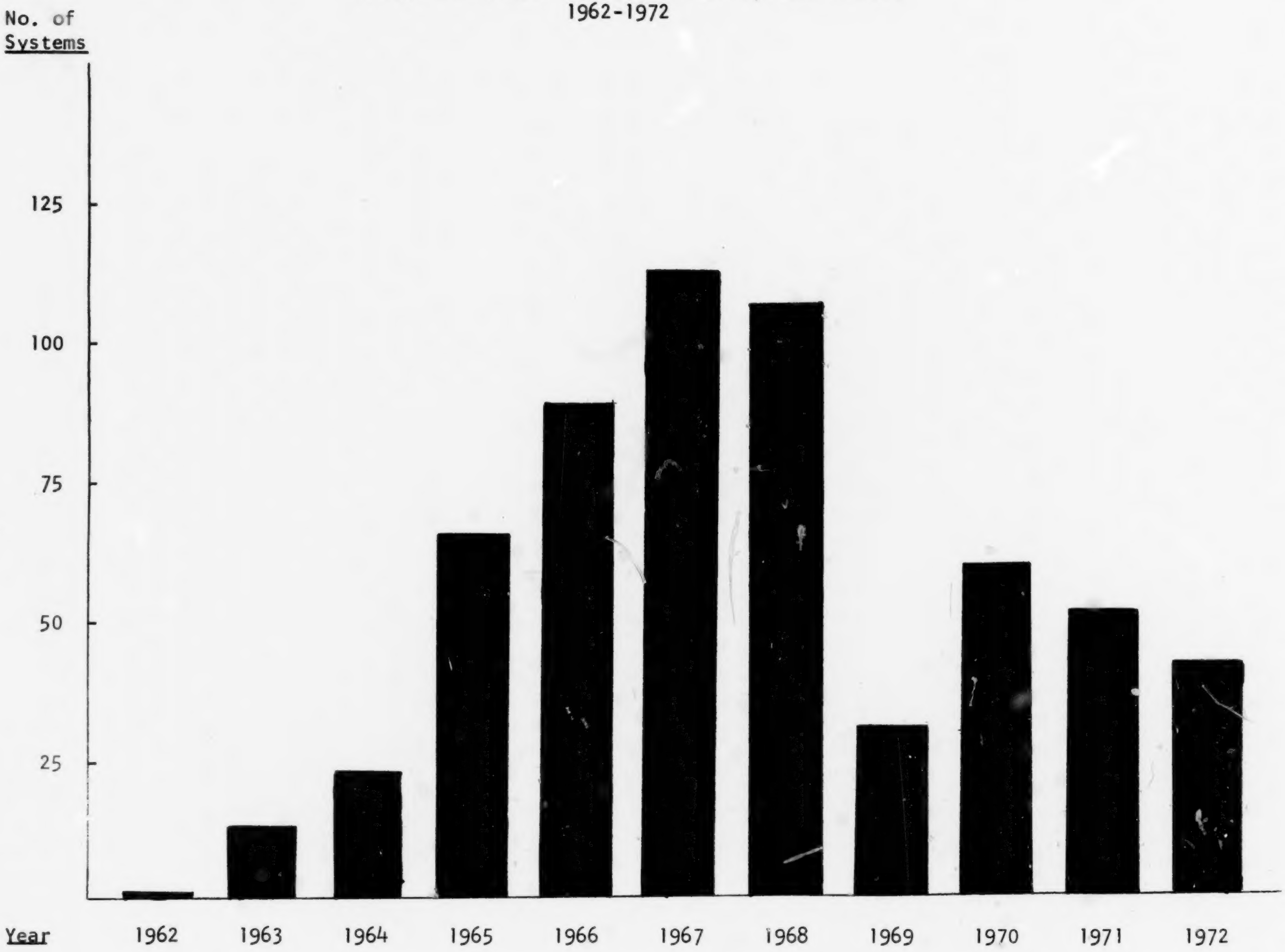

Table 1. Selected Characteristics of Mississippi Rural Water Systems, By Year of Establishment

Characteristics	Year System Was Established										
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972*
Number of Systems	1	13	22	64	89	114	105	30	58	50	42
Number of Loans and Grants Given to New Systems	1	16	28	76	114	150	130	41	86	75	52
Mean Number of Users at First Funding	87.0	94.6	131.0	139.2	116.3	167.3	138.3	251.6	216.6	293.6	297.6
Percent of Systems** Having:											
100 or more users at first funding	0.0	3.1	50.0	57.8	55.0	51.7	59.0	63.3	65.5	74.0	64.3
200 or more users at first funding	0.0	0.0	18.2	17.2	9.0	21.0	23.8	33.3	29.3	54.0	50.0
Mean Amount of Loan or Grant at First Funding (in dollars)	75,000	55,769	119,318	132,031	135,393	137,061	142,142	179,166	155,171	227,000	251,190
Percent of Systems Whose Initial Funding Exceeded $150,000	0.0	0.0	22.5	31.2	33.7	28.1	35.2	53.3	36.2	66.0	57.1

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*Information available only through July, 1972.

**Information not available on 30 cases.

Table 1. continued

Characteristics	Year System Was Established										
	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972*
Percent of Systems*** With Racial Composition:											
All white	0.0	7.7	4.6	7.8	15.7	9.6	14.3	6.7	12.1	6.0	7.1
All nonwhite	0.0	0.0	0.0	1.6	0.0	3.5	4.8	3.3	1.7	0.0	4.8
Less than 10% nonwhite	100.0	46.1	31.8	26.6	27.0	24.6	19.0	3.3	17.2	18.0	11.9
10-39% nonwhite	0.0	30.8	36.3	35.9	31.4	31.6	32.3	43.3	29.3	30.0	30.9
40-69% nonwhite	0.0	0.0	13.6	7.8	9.0	12.3	13.3	13.3	20.7	34.0	16.7
70% or more nonwhite	0.0	0.0	9.2	14.1	5.6	11.3	16.2	3.3	13.7	6.0	12.0

***Information not available on 59 cases.

Table 2. Racial Composition of Mississippi Rural Water Systems' Membership, By Size of Systems

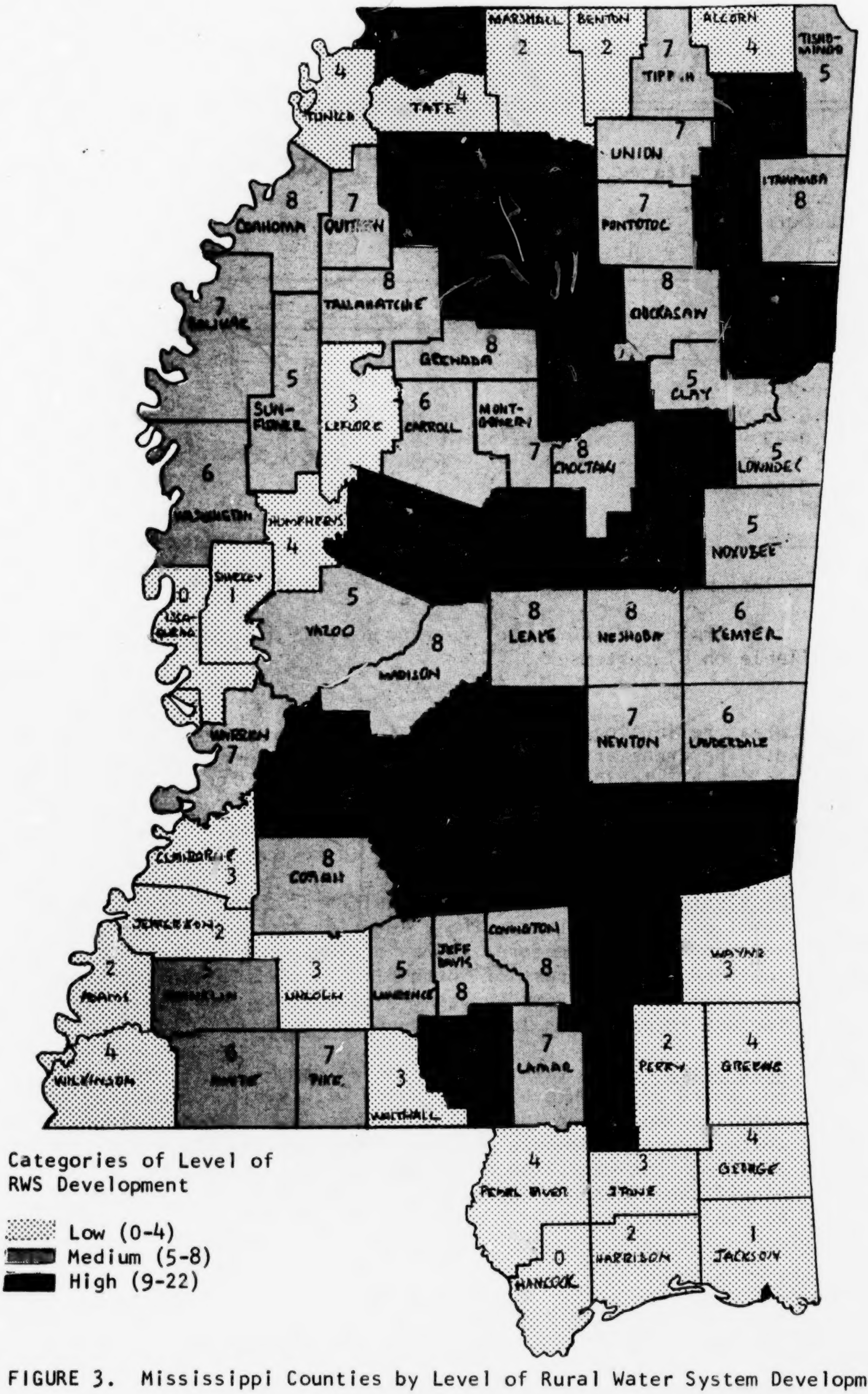
Percent Nonwhite Composition of Membership*	Size of Systems** Small 1-99 Members (N=173)	Meduim 100-199 Members (N=176)	Large 200 & over Members (N=158)	Mean Number of Current Users
	Percent of Systems			
0%	15.6	8.5	10.1	159.0
1.0-9.9%	17.3	28.4	23.4	192.6
10.0-29.9%	24.9	24.4	25.8	179.7
30.0-49.9%	8.6	16.0	15.8	291.4
50.0-69.9%	5.8	6.8	8.4	185.9
70.0-99.9%	13.8	7.4	5.8	136.5
100%	5.8	0.0	0.0	49.6

*Information not available on 46 systems.

**Determined by number of current users. Information was not available on 81 systems.

four areas reflecting variation in water system development were identified. The areas are delineated on a map shown in Figure 4, and the data in Table 3 indicate the level of development for counties in each area. The delineated areas, in order of increasing use of rural water systems, were (1) Mississippi Coast, (2) West-Delta, (3) South, and (4) North-Central. These are described as follows:

> Mississippi Coast. This area consists of three counties with a total of three systems. These counties are less developed than adjacent ones; therefore, it was dubious whether they should be included with the rest of South Mississippi. Extensive coverage by urban water systems and easy availability are likely key factors in affecting level of development.
>
> West-Delta Area. Twenty-one counties compose this area, nearly one-third of which are in the Delta with a high percentage of nonwhite population in rural areas who lack adequate water, and white plantation owners who have means for private water systems. The large out-migration of population in this area may be a significant factor. The Delta was identified as a problem area by FHA officials.



MARSHALL 2
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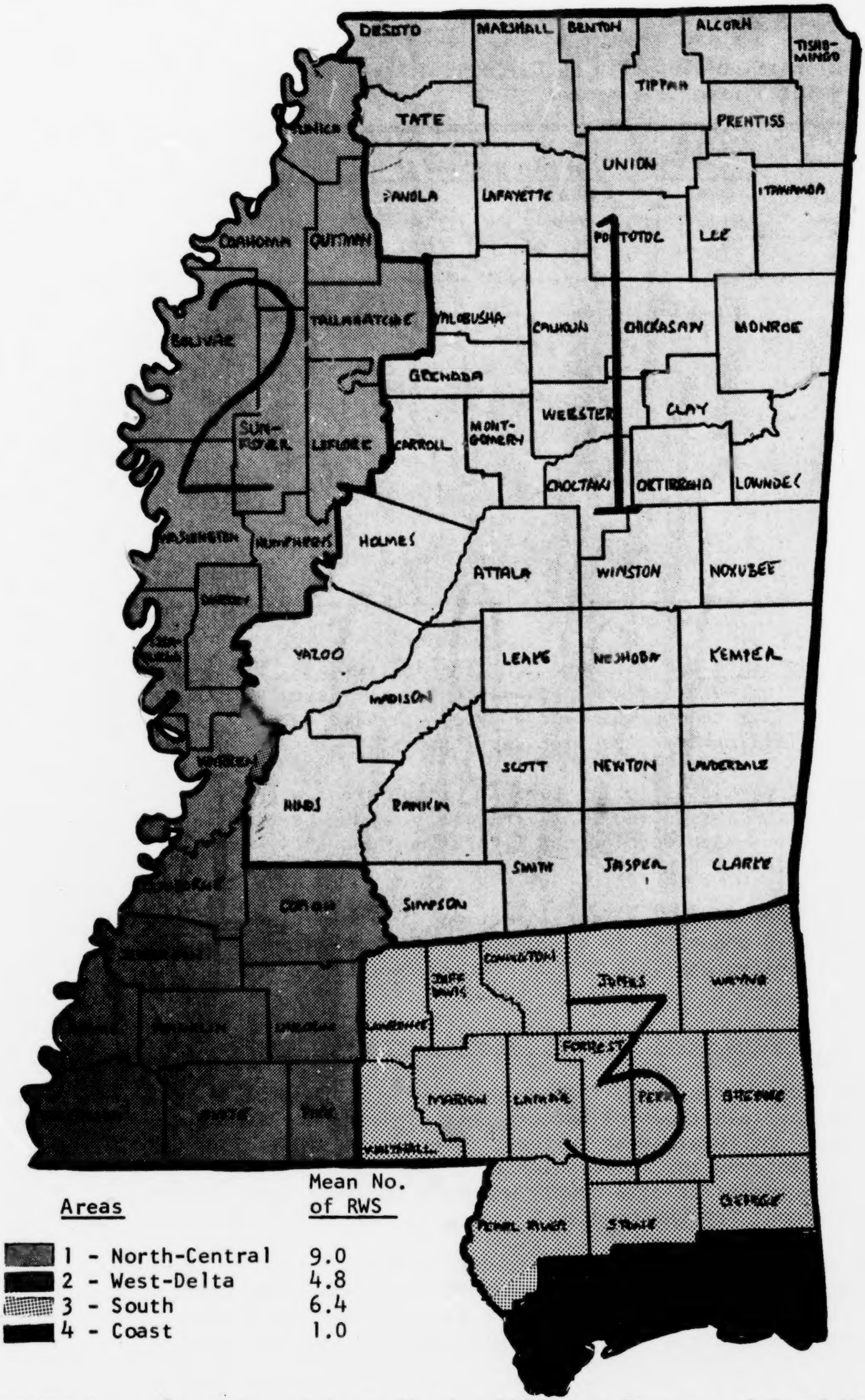
TISHOMINGO 5
TUNICA 4
TATE 4
UNION 7
PONTOTOC 7
ITAWAMBA 8
COAHOMA 8
QUITMAN 7
TALLAHATCHIE 8
CHICKASAW 8
BOLIVAR 7
GRENADA 8
SUNFLOWER 5
LEFLORE 3
CARROLL 6
MONTGOMERY 7
CHOCTAW 8
CLAY 5
LOWNDES 5
WASHINGTON 6
HUMPHREYS 4
NOXUBEE 5
ISSAQUENA 0
SHARKEY 1
YAZOO 5
MADISON 8
LEAKE 8
NESHOBA 8
KEMPER 6
NEWTON 7
LAUDERDALE 6
WARREN 7
CLAIBORNE 3
COPIAH 8
JEFFERSON 2
ADAMS 2
FRANKLIN 5
LINCOLN 3
LAWRENCE 5
JEFF DAVIS 8
COVINGTON 8
WAYNE 3
WILKINSON 4
AMITE 6
PIKE 7
WALTHALL 3
LAMAR 7
PERRY 2
GREENE 4
PEARL RIVER 4
STONE 3
GEORGE 4
HANCOCK 0
HARRISON 2
JACKSON 1
Categories of Level of RWS Development
Low (0-4)
Medium (5-8)
High (9-22)

FIGURE 3. Mississippi Counties by Level of Rural Water System Development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WASHINGTON
HUMPHREYS
HOLMES
ATTALA
WINSTON
NOXUBEE
SHARKEY
ISSAQUENA
YAZOO
LEAKE
NESHOBA
KEMPER
MADISON
WARREN
SCOTT
NEWTON
LAUDERDALE
HINDS
RANKIN
SMITH
JASPER
CLARKE
SIMPSON
COPIAH
COVINGTON
JONES
WAYNE
JEFF DAVIS
LAWRENCE
3
FRANKLIN
LINCOLN
FORREST
MARION
LAMAR
PERRY
GREENE
AMITE
PIKE
WALTHALL
GEORGE
PEARL RIVER
STONE
Areas
Mean No. of RWS
1 - North-Central 9.0
2 - West-Delta 4.8
3 - South 6.4
4 - Coast 1.0

FIGURE 4. Delineation of Areas Showing Different Patterns of Rural Water System Development

Table 3. Mississippi Counties by Delineated Areas and Level of Rural Water System Development

Level of Rural Water System Development	Areas and Number of Counties Coast (N=3) No.	 %	 West Delta (N=21) No.	 %	 South (N=14) No.	 %	 North Central (N=44) No.	 %
Low (N=24)	3	100.0	10	47.6	7	50.0	4	9.0
Medium (N=35)	0	0.0	11	52.4	4	28.6	20	45.5
High (N=23)	0	0.0	0	0.0	3	21.4	20	45.5
Total Number of Systems	3		100		89		396	
Mean Number of Systems	1.0		4.8		6.4		9.0	

South Mississippi. This area contains 14 counties, half of which had low rural water system development. The level of development, though similar to the West Delta area, was more varied with counties falling into the high level group.

North Central Mississippi. Largest of the areas with 44 counties, North Central Mississippi has a generally moderate-high level of rural water system development with a few downwardly deviant counties along the northern borders.

While further analytical consideration to area patterns is beyond the scope of this paper, it is an important concern and will be included in the comprehensive analysis of the state-wide data.

Selected Factors and Level of Rural Water System Development

It was stated previously that an underlying assumption of this study is that certain types of factors pose limiting conditions to the development of rural water systems. The analysis discussed in this section concerns the association of demographic and socio-economic characteristics of a county with the level of rural water system development for the county.

As described in the preceding section, a measure used to determine level of rural water system development was total number of systems organized in the county, classifying the 82 counties into groups representing three levels of development. Associations between the variables, with this preliminary analysis, should be viewed in light of limitations of percentage comparisons for categories based on a small number of cases, though data were obtained for all the counties in the state.

Demographic characteristics. The economic feasibility of water system development is affected by the area's population features. However, the demographic data, which are presented in Table 4, reveal generally slight associations between population characteristics and level of water system development. The most striking differences appear for size of population and percent of nonwhite population. Counties with an extremely low population had a low level of water system development, while those with a large number of inhabitants tended to have higher levels of development. Counties that had 50 percent or greater nonwhite population tended to have lower levels of rural water system development than those with lesser proportions of nonwhite populations. On the other hand, more counties with very low population density, less than 30, had low levels of development than did counties with greater population density. Contrary to expectations, population change had little or no bearing on level of rural water system development.

There was a slight tendency for level of development to increase as percent of rural farm population decreased. This suggests that in predominantly rural farm areas, population density is low affecting the feasibility, economically and technologically, of establishing a rural water system. Similarly, the association, though slight, between degree of urbanization and level of development was likely due to the low proportion of counties with a low degree of urbanization having high level of development.

Socioeconomic characteristics. Measures of socioeconomic variables are treated in Table 5. These include one measure of educational level and three measures of income. Statistically, the associations between the socioeconomic measures and level of rural water system development were generally slight. The magnitude of the gamma values were highest for median education and percent of population with income below poverty level. An examination of the data shows that counties with low median education tend to have low to medium levels of development. Counties with a poverty level greater than 20 percent were more likely to have low or medium levels of development than those with lower poverty level. There was little association between median county income and percent of population with income over $15,000. This may indicate that residents of counties with higher levels of living meet their water needs through other sources.

Discussion

The associations between socioeconomic and demographic characteristics and level of rural water system development were found to be negligible when examined on a county basis. The lack of association could reflect one of several methodological considerations. One

Table 4. Selected Demographic Characteristics of Mississippi Counties By Level of Rural Water System Development

Characteristic	Level of Rural Water System Development Low (N=24)	Medium (N=35)	High (N=23)	Total (N=82)	Gamma
	--Percent--				
Population					
Less than 10,000 (N=10)	70.0	30.0	0.0	100.0	
10,000-19,999 (N=38)	23.7	52.6	23.7	100.0	
20,000-29,999 (N=15)	26.7	26.7	46.7	100.0	.346
30,000-39,999 (N=5)	20.0	40.0	40.0	100.0	
40,000-49,999 (N=7)	14.3	57.1	28.6	100.0	
50,000 + (N=7)	28.6	28.6	42.9	100.0	
Population Change From 1960-1970 (in percent)					
Less than -20 (N=4)	75.0	25.0	0.0	100.0	
-10 to -20.0 (N=14)	21.4	71.4	7.1	100.0	
-5 to -9.9 (N=16)	18.8	31.3	50.0	100.0	
-0.1 to -4.9 (N=14)	28.6	42.9	28.6	100.0	.075
0 to 4.9 (N=11)	36.4	45.5	18.2	100.0	
5 to 9.9 (N=9)	11.1	66.7	22.2	100.0	
10 to 19.9 (N=9)	33.3	22.2	44.4	100.0	
20 + (N=5)	60.0	0.0	40.0	100.0	
Population Density					
Less than 30 (N=28)	42.9	32.1	25.0	100.0	
30-49.9 (N=33)	21.2	51.5	27.3	100.0	
50-69.9 (N=6)	16.7	50.0	33.3	100.0	.188

Table 4. continued

Characteristic	Level of Rural Water System Development				Gamma
	Low (N=24)	Medium (N=35)	High (N=23)	Total (N=82)	
70-89.9 (N=7)	28.6	42.9	28.6	100.0	
90 + (N=8)	25.0	37.5	37.5	100.0	
Degree of Urbanization (in percent)					
Less than 10 (N=24)	41.7	41.7	16.7	100.0	
10-29.9 (N=21)	23.8	38.1	38.1	100.0	
30-49.9 (N=21)	19.0	52.4	28.6	100.0	.154
50-69.9 (N=12)	25.0	50.0	25.0	100.0	
70 + (N=4)	50.0	0.0	50.0	100.0	
Percent Rural Farm					
Less than 10 (N=20)	30.0	35.0	35.0	100.0	
10-19.9 (N=38)	26.3	39.5	34.2	100.0	-.176
20-29.9 (N=19)	31.6	57.9	10.5	100.0	
30 + (N=5)	40.0	40.0	20.0	100.0	
Percent Rural Nonfarm					
Less than 40 (N=13)	30.8	38.5	30.8	100.0	
40-59.9 (N=39)	30.8	43.6	25.6	100.0	.046
60 + (N=30)	26.7	43.3	30.0	100.0	
Percent Nonwhite					
Less than 10 (N=2)	0.0	100.0	0.0	100.0	
10-29.9 (N=25)	36.0	28.0	36.0	100.0	
30-49.9 (N=30)	20.0	40.0	40.0	100.0	-.209
50-69.9 (N=22)	27.3	63.6	9.1	100.0	
70 + (N=3)	100.0	0.0	0.0	100.0	

Table 5. Selected Socioeconomic Characteristics of Mississippi Counties By Level of Rural Water System Development

Characteristic	Level of Rural Water System Development				Gamma
	Low (N=24)	Medium (N=35)	High (N=23)	Total (N=82)	
		--Percent--			
Educational Level (in years of school)					
7.0-8.4 (N=7)	71.4	28.6	0.0	100.0	
8.5-9.4 (N=18)	27.8	55.6	16.7	100.0	
9.5-10.4 (N=34)	17.6	47.1	35.3	100.0	.220
10.5-11.4 (N=12)	33.3	33.3	33.3	100.0	
11.5 + (N=11)	36.4	27.3	36.4	100.0	
Income Level (in dollars)					
2,000-2,999 (N=1)	100.0	0.0	0.0	100.0	
3,000-3,999 (N=9)	44.4	44.4	11.1	100.0	
4,000-4,999 (N=28)	21.4	50.0	28.6	100.0	
5,000-5,999 (N=24)	20.8	50.0	29.2	100.0	.104
6,000-6,999 (N=13)	46.2	30.8	23.1	100.0	
7,000-7,999 (N=5)	20.0	20.0	60.0	100.0	
8,000 + (N=2)	50.0	0.0	50.0	100.0	
Percent with Income Less than Poverty Level					
Less than 20 (N=5)	40.0	0.0	60.0	100.0	
20-29 (N=25)	28.0	44.0	28.0	100.0	
30-39 (N=32)	21.9	43.8	34.4	100.0	-.197
40-49 (N=16)	31.3	62.5	6.3	100.0	
50 + (N=4)	75.0	0.0	25.0	100.0	

Table 5. continued

Characteristic	Level of Rural Water System Development Low (N=24)	Medium (N=35)	High (N=23)	Total (N=82)	Gamma
Percent with Income Over $15,000					
0.0-5.9 (N=45)	26.7	42.2	31.1	100.0	
6.0-9.9 (N=29)	31.0	51.7	17.2	100.0	-.083
10.0-13.9 (N=7)	42.9	14.3	42.9	100.0	
14.0 + (N=1)	0.0	0.0	100.0	100.0	

explanation is lack of precision in measurement for the key variable, level of rural water system development, which was measured with a single factor scale. More precise measurement would take into account such factors as nature and size of systems, single or multi-based systems, and actual and potential growth measures. Another dimension of rural water system development may be impacts a rural water system has had on an area including changes in (1) water consumption patterns, (2) agricultural and industrial land use, (3) social organization. It has been pointed out that many rural residents view the water system as a visable sign of the continued existence of the rural community.

Finally, rural water system development in a single county may be dependent on the interaction of many types of variables, those mentioned in this paper and others not mentioned. Therefore, analysis conducted at a different level where the focus is on regional patterning rather than county differences may provide a better method to meaningfully examine the importance of socioeconomic-demographic variables to rural water system development.

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ENVIRONMENTAL LOBBYING: TAKING THE RIGHT ISSUE TO THE RIGHT PLACE AT THE RIGHT TIME*

Harold E. Albert

BACKGROUND

A particularly bitter struggle between certain segments of the private sector and the state and local governments of South Carolina occurred in 1969 and 1970. The private sector groups appealed to the national government for help and got it. Interestingly, many of the private sector groups in this instance were the very ones which would normally advocate "states' rights."

The conflict developed when South Carolina public officials announced on October 1, 1969, that Badische Anilin und Soda-Fabrik (BASF) would build a multi-million dollar chemical plant at Victoria Bluff in Beaufort County. As it became apparent that the plant would really be a petro-chemical facility, the residents of nearby Hilton Head Island became increasingly alarmed at the potential for environmental degradation, because petro-chemical plants not only normally pollute, but also spawn satellite industries with high pollution potential.

Primary antagonists in the ensuing controversy included the governments of South Carolina and Beaufort County on the side of BASF, and the Hilton Head Company, the Sea Pines Plantation Company and three commercial fishing industries aligned in opposition seeking the support of the national government. Other groups were formed to give the appearance of breadth to the opposition and to exploit the public anxiety over environmental quality. Still other groups participated in a behind-the-scenes type activity.

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Included among those opposing BASF's location at Victoria Bluff were an exceptionally high percentage of retired corporation presidents and vice presidents, retired Generals, Admirals and others of high military rank and professional prestige. Such people had long practiced the skills of interest group activity and were well known in Washington, D. C. Thus, when they went to Washington for help, they were not meeting national level governmental personnel for the first time. Many of the opposition leaders went to Presidential advisors, Secretaries of Departments, Under Secretaries, and Deputy Secretaries on a first-name basis.

After highly intensive conflict from January through March, 1970, BASF halted construction preparations and finally withdrew all plans for a Victoria Bluff plant in January, 1971. The opposition's activities followed three basic courses: (1) an intensive publicity campaign with emphasis on the environment and state governmental secrecy, (2) intensive activity at the national governmental level designed to force such severe restrictions on BASF plant effluent that BASF would be unwilling to meet the demands, and (3) use of the courts to delay schedules, obtain information, and generally harass BASF and South Carolina public officials.

This paper concentrates on the second course of action: plugging in the interest groups at the national governmental level.

EARLY STAGES OF CONFLICT

It sounds terribly naive in view of the nature of the Hilton Head Island population, but the prevailing view during the early stages of the conflict was that it could and should be resolved by working "within the system." The BASF opposition believed that a little public opinion brought to bear on state officials would cause them to withdraw their support from BASF and BASF would then go away. Only gradually did this belief change, but in the meantime numerous ad hoc interest groups were formed and local legal counsel was retained.

The "early stages of the conflict" might be defined as that period between June and December 31, 1969. During that period of time it was announced that several law firms had been retained to represent the anti-BASF forces. These included:

-Barnwell, Whaley, Stevenson and Patterson, of Charleston;
-Murdaugh, Eltzroth and Peters of Hampton;
-Dowling, Dowling, Sanders and Dukes, of Beaufort;
-D. L. Hartman, of Atlanta.

A group including representatives from these law firms met on Hilton Head Island on December 2, 1969, to lay out a plan of resistance to BASF.* This plan was followed with no appreciable results until David Sive, famous environmental lawyer of Winer, Neuberger and Sive in New York, was retained in January 1970. Sive modified the legal plan and it subsequently played a very important role in driving BASF away from Victoria Bluff.

Very soon after the announcement that BASF would build at Victoria Bluff an ongoing interest group on Hilton Head Island met to discuss their formal reaction to the announcement. The Hilton Head Island Community Association (HHICA) was created in 1966 and its President in 1969 was Emerson Mulford. Mulford said he called

> a special meeting to determine the wishes of the Island Community Association as to whether or not we should oppose or do what relative to this petrochemical complex. And prior to holding this special meeting, we had contacted various and sundry interested people, such as the delegation, such as the Pollution Control Commission /sic/ in South Carolina. And we had meetings with them to determine what, shall we say, safeguards were inherent in the political structure. We didn't like at all what we heard. We felt that there were no safeguards. We felt that the laws were inadequate. We felt that the political segment was giving too much, getting too little, and running a great risk. . . . As a result, the Association went on record, and I as their President was instructed to fight the establishment of BASF on Victoria Bluff.[1]

The HHICA served as a rallying point for the people of the Island, and assigned most of the task of opposing BASF to the Conservation and Cultural Advancement Committee of the Association.

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*More complete descriptions of the legal aspects of the BASF conflict may be found in the writer's Ph.D. dissertation at Florida State University, and in a chapter of the Project Completion Report for B-034-SC at Clemson University.

The Conservation and Cultural Advancement Committee of the HHICA was chaired by Franklin Rouse. Rouse had been President of the Management Conference Board in New York City for fifteen years prior to his retirement. Mrs. Rouse had worked twenty-two years with the British Broadcasting Corporation in New York. Both knew their way around in the business and political world and knew how to get publicity for a program when they wanted it. One of the major official functions performed by the Conservation and Cultural Advancement Committee was to get publicity for the BASF opposition, but Mr. and Mrs. Rouse were both extremely active in researching data about BASF and similar type industries. Individual members of the HHICA probably performed their most important work as individuals with contacts in Washington, rather than as an Association.

An entirely different kind of interest group was an ad hoc group known as the Citizens Association of Beaufort County (CABC). The President of the CABC was Rufus Taylor (Vice-Admiral, USN, Ret.), who described himself as

> very much a front man and an interested individual who was willing to head up an organization and who was personally deeply concerned that adequate study had not been given to the consequences of the project.[2]

Admiral Taylor described the role of the Citizens Association of Beaufort County as

> stirring up public interest in the pros and cons of the project, which was of course the objective. And it created a statewide awareness of the risks being incurred. Outside of that I think that the Citizens Association was not only effective in the state but had some significance at the national level in drawing attention of the national authorities and the national press to the risks being invited by those who encouraged the BASF project.[3]

The Citizens Association of Beaufort County was conceived among fishing buddies, including Admiral Taylor and the late Dr. Colden Battey. After talking among themselves, with Joab Dowling, with representatives of the Blue Channel Fishing Corporation, the Ocean Lake and Fish Company, and the Hilton Head Island Black Fishing Cooperative, they agreed to form an association. Representatives from the Hilton Head Island Community Association got word of it and asked to participate in any such group. An eleemosynary association was established, but the remaining problem was money. Taylor said:

> We were going to get the money from contributions, but it didn't seem like it would be enough. And after some

> discussion, over a period of time, we finally got guarantees from the Hilton Head developers to pay expenses of an advertising campaign for the purpose of exposing to the public what risks were involved in this, and asking for a moratorium on a decision until a re-study could be made to determine whether or not this was in the best interests of the people of Beaufort County.[4]

The advertising campaign mentioned by Taylor was to be coordinated through the Bradley, Graham and Hamby agency in Columbia, S. C. This firm was retained effective January 1, 1970, with the CABC "officially" paying the bill, but with the Hilton Head Company and the Sea Pines Plantation Company paying any amount required above what the CABC could raise. Newspaper and other media releases were to be the responsibility of the agency but they were released under the heading of CABC. This caused some very tense moments when Admiral Taylor refuted one of the newspaper ads and refused to let any more come from Bradly, Graham and Hamby under CABC heading unless he personally approved prior to their release.

Bradley, Graham and Hamby is an agency known and skilled in the political world. They had handled campaigns for Ernest Hollings (now U. S. Senator) and for Strom Thurmond (also U. S. Senator), and did some of the publicity work for the unsuccessful gubernatorial campaign of Albert Watson in 1970. They did not, however, have significant influence in the state political camps, and exerted most of their direct political influence at the national level. When they first approached Senator Hollings, he showed no interest in resisting BASF. Senator Thurmond's office gave the same initial response. Dolly Hamby believed that this was Thurmond's staff response rather than the Senator himself. She therefore called Senator Thurmond at his home on New Year's eve and pleaded for help, and is of the opinion that her call stimulated Thurmond to request Secretary of Interior Walter Hickel to make an investigation.[5] When Senator Thurmond wrote to Secretary Hickel requesting such an investigation, the news was broken by Hugh E. Gibson of the Charleston News and Courier, who got his lead from Dolly Hamby.

The catalyst which moved the controversy from what is here described as the "early stages" into full-scale conflict was a Symposium held on Hilton Head Island, January 4-8, 1970. Orion Hack conceived the idea and convinced his brother Fred that the Hilton Head Company should pay for it. Participants in the Symposium, "South Carolina in Crisis: Progress Without Pollution," included representatives from the leading conservation magazines and groups, scientists from various universities, local and national interest group leaders, officials of various state agencies, and Dr. Herbert Ende of BASF. Perhaps the major impact of the Symposium was that it made BASF and Victoria Bluff a national issue. The three conclusions reached during the Symposium were: (1) there should be a moratorium on construction until certain studies could be completed; (2) BASF should post a $25 million indemnity bond; (3) an objective study of the ecology of the area should be performed by outside groups. The cost of the Symposium exceeded $60,000, but Orion Hack believes it was well worth it because it did get the attention of several important people in Washington.

THE WASHINGTON OPERATION

Direct opposition to BASF at the national level began with a telegram from Orion Hack to Harry Dent (Special Counsel to the President) at the end of the Symposium.* Hack received a reply from Dent dated January 12, 1970, in which assurance was given that the telegram would be given to the right person, whom Hack and others interpreted to mean President Nixon. This is not as unrealistic as it might seem at first glance. There were very many people who were friends of those opposing BASF and who had rather direct access to the President.

Fred and Orion Hack began an intensive Washington operation January 26-28. Responding to the question: "How would you describe South Carolina's national-level politicians' role in the BASF struggle?" Orion Hack said, "Senator Thurmond helped us tremendously in the Interior Department. Especially cooperative was a man named John Evans in Strom's office. The Senator just told us to work it out with Evans and we did."[6] John Evans is Thurmond's Executive Assistant and the logical person to arrange appointments in the Executive Branch. Thurmond himself was apparently noncommittal with Fred and Orion Hack, insisting as he did with everyone else who talked with him that he was only interested in getting the truth out in the open. Evans seemed also to have taken a neutral position, making appointments in the

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*Much of the rest of this section is a reduction of Chapter XI of the author's Ph.D. dissertation, "Enter the National Government: Help!," Interest Groups, Intergovernmental Relations and the Environment: A Study of How A $200 Million Industrial Complex was Prevented in South Carolina, The Florida State University.

Executive Branch for both pro- and anti-BASF people. He took the same stance as the Senator: Open the doors for any and all so the facts prevailed.[7]

The Hack brothers talked with the following people in Washington:

-Senator Thurmond;
-John Evans;
-Representative Albert Watson (R., S. C.);
-Senator Richard Russell (D., Ga.);
-Senator Gaylord Nelson (D., Wis.: member of the Senate Interior and Insular Affairs Committee);
-Dr. John L. Buckley (Science Advisor to the President);
-Henry Diamond (of the Citizens Advisory Committee on Environmental Quality, which Committee was not then fully appointed);
-W. W. Lyons and Willard M. Spaulding, Jr. (Water Quality and Research Commission of the Department of Interior);
-Bryan Laplante and Robert Burd (Laplante: Associate Commissioner of the Federal Water Pollution Control Administration (FWPCA); Burd: Acting Deputy Assistant Commissioner for Operations of FWPCA);
-Tom Pheiffer (Water Resource Specialist, Department of Interior);
-Sam Love (Southeastern Director of Environmental Action Committee);
-Dr. John Withers (member of the Committee on Undergraduate Education in the Biological Sciences and Professor of Biology at Clark College, Atlanta);
-Marion Edey (Chairman of the Staff of League of Voters which functions out of Friends of the Earth).

Dr. John Withers, Marion Edey, and Tom Pheiffer had been present at the Symposium, and Dr. Withers had already apprised Senator Nelson of the situation. Nelson was the only one of the elected politicians visited who took a clear stand on the side of the anti-BASF forces. Thurmond, Watson, and Russell all took a non-committal position. Lyons and Spaulding indicated what turned out to be the Department of Interior's general posture: this was an opportunity to attack the problem of pollution before it actually happened. They implied that they would encourage Secretary Hickel to write to BASF, advising [illegible] that it might be wise to withhold actual construction until studies were complete. This course of action would insure the demise of the opposition when and if BASF finally built, because it would then be reasonably certain that no pollution would occur. It would also protect BASF against investing large sums of money in facilities which might not be permitted to operate.

Orion Hack is of the opinion that some of the better advice during the entire conflict was obtained during the January 26-28 work-trip in Washington. Dr. John Buckley

> essentially laid out the strategy that we would follow--telling us not to let up in our efforts until the land was repossessed by the state, because these people would try every dodge to get us to ease off and then build when we weren't looking.[8]

Buckley said that the Hack brothers did not come to him through the efforts of Senator Thurmond's office:

> The Hack's came through President Nixon's office, above the Hickel level. There was an Environmental Quality Council and the President also had a Cabinet-level Council on the Environment at the time. This was the way they came.[9]

There were several possible ways the Hack's could have come "through President Nixon's office, above the Hickel level." One, of course, was Harry Dent, who had worked for Senator Thurmond before going into the President's office. It would have been feasible for someone still in the Senator's office to introduce the Hack's to Harry Dent; if they were not already known. A second possibility was that Raymond Kotrla, who was a member of the President's National Wildlife Resources Commission, had interceded with the President. A source who refuses to be identified for the record (but who was prominent in the fight and whose every other verifiable piece of information has been accurate) said that Kotrla went directly to the President about the BASF issue. Still a third possibility would have been that Colonel Tom Howard (chairman of the Executive Committee of the Fort Knox National Bank, Fort Knox, Kentucky, and owner of property on Hilton Head Island) got to the President. Howard was a close personal friend of A. B. Hermann (Special Assistant to Rogers C. B. Morton, then Chairman of the Republican National Committee) and Howard visited with Hermann in late Jaunary or early February to talk about the problems emanating from BASF's decision to build at Victoria Bluff. The visit was followed by a letter from Hermann to Franklin Rouse (Chairman of the Conservation and Cultural Advancement Committee of the Hilton Head Island Community Association) expressing appreciation for Howard's visit and implying assistance to the cause. Colonel Howard also visited Morton, expressing the problem as viewed by Hilton Head property owners. It is not unreasonable to think that Morton may have spoken to the President about the issue; particularly since Tom Howard, the Hack brothers, and many others from Hilton Head belong to that group sometimes ingloriously referred to as "the fat cats." Finally, it is possible that Elisha

Walker was the intermediary through which word got to the President. Walker owned Spring Island, which is directly across the Colleton River from the BASF property at Victoria Bluff, and the value of his property would have declined if BASF would have built and polluted.* Spring Island is said to be an excellent hunting ground, and Walker may have been concerned about damage to wildlife in the event of pollution of the Colleton River. More importantly, it seemed likely that the President would be willing to listen to a former National Treasurer of the Republican Party--Elisha Walker.

The Hack brothers were not the only ones to go from Hilton Head to Washington in December and January. Joe Elvove also visited the office of John R. Quarles, Jr. (Assistant to the Under Secretary of the Department of Interior), during the week of December 15, 1969. Elvove did not get to talk with Quarles, but did talk with his aides. Quarles wrote to Elvove on February 4, 1970, assuring him of Interior's interest, and indicating that the Bureau of Sport Fisheries and Wildlife would cooperate with FWPCA and other Interior Department agencies in a thorough investigation.

Vice Admiral Rufus Taylor was also working through his contacts in Washington to encourage national-level resistance to BASF. Taylor worked through both official and unofficial channels. He regarded Carl Klein as the man in Interior most knowledgeable about BASF. Raymond A. Kotrla, a friend of both Taylor and Klein, made the approach to Klein. Kotrla was a member of the President's National Wildlife Resources Commission and the Washington representative of Trout Unlimited. Kotrla's main function seems to have been to "interject understanding of the nature of the controversy into the federal bureaucracy, and those officials particularly who were concerned with environmental control."[10] He was also reported as going directly to Leslie Glasgow (Assistant Secretary for Fish and Wildlife, Department of Interior). Kotrla gathered information on BASF operations elsewhere in order to present a picture of what would likely happen in Beaufort County if BASF located there. He had a Mr. Ancarrow check out the BASF operations at Jamesburg, Virginia, and it did not appear to be the same as Val Wasson (Managing Director of the Williamsburg-James City County

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*This conclusion was often expressed, but it seems more an attempt to rationalize than a real possibility. Walker has since offered Spring Island to the National Park Service if they will declare it a Wilderness Area.

Chamber of Commerce) had described to Dean Poucher (Executive Director of the Beaufort County Chamber of Commerce) in a letter of January 2, 1970. Wasson had told Poucher that Dow-Badische made excellent corporate citizens, did no damage to the water, and that swimming, fishing, crabbing, and other recreational uses of water were common near the point of discharge of their effluent.

No chances were missed to make contacts in Washington which might be helpful in stopping BASF. The effort proved to be even a good time for renewing long neglected friendships. One such renewal involved George Dibert, an Island retiree. Dibert worked in the advertising business for more than forty years; thirty-three of them with the J. Walter Thompson Company. Stanley Resor, Sr., bought the J. Walter Thompson Company in 1916, and proceeded to turn it into the largest advertising agency in the world. Dibert recounted his relationship with the Resor Family:

> I lived in Grennwich, Connecticut, as did Mr. Resor, Sr., and he very frequently would call several of us over to his home for business sessions discussing account situations, and on several occasions a redheaded boy about eleven years old would come in on a bicycle and would be introduced around to any that he had not met up to that point, and that was Stanley Resor, Jr.
>
> I had no more contact with Stanley Resor, Jr., until I put in a phone call in February, 1970, and talked with his aide. I identified myself and told him I would very much like to see Mr. Resor on this matter. Mr. Resor was gracious enough to invite me to come to Washington to see him. I was very complimented actually at the very warm greeting that he gave me when he walked out in the reception room. He said, "George, it's been a long time since I've seen you."
>
> . . . .
>
> Also present was Mr. Authur Jordan III, who is the General Counsel of the Army. The purpose of my visit there was to see whether any help could be received at the federal level through the Army and through the Corps of Engineers to help us in our efforts to avoid pollution from the BASF plant which was contemplated for Victoria Bluff.[11]

Secretary Resor indicated to Mr. Dibert that President Nixon had just recently announced the beginning of a $20 billion effort to clean up existing pollution and it didn't make much sense to spend such massive amounts of money while permitting new pollution to occur. Significantly, Resor told Dibert that the Department of the Army and the Corps of Engineers were then working with the Department of Interior to avoid new pollution.

The Corps of Engineers was under heavy criticism from practically every quarter at the time George Dibert met with Secretary Resor and Counsel Jordan. Article after article was appearing in national magazines and newspapers, criticizing the Corps for being overly concerned with building dams and canals with no thought for the prevailing ecology. Mr. Jordan suggested to Secretary Resor that perhaps the Department of the Army should insist on reviewing the entire file of each Corps of Engineering project where there was the slightest possibility of environmental damage, and Resor agreed. If such a policy were adopted, it would mean among other things that any District Engineer would want to have in his file evidence of local support as well as local objections as proof of thoroughness on his part.

There is no evidence available to show the exact impact of Dibert's visit with Resor, but the subsequent course of events seem to indicate that it was a profitable visit for the anti-BASF forces. Within two weeks of the visit, the Corps of Engineers announced that new regulations "require an applicant for a permit to dump effluent into navigable waters--under supervision of the U. S. Corps of Engineers--to submit a chemical analysis of the effluent."[12] This announcement was made by Colonel Burke Lee (District Engineer, Charleston) who also said that such applications were referred to the U. S. Water Pollution Control Administration, the U. S. Fish and Wildlife Service, and the state Pollution Control Authority. Early in March, Admiral Taylor and George Dibert both received letters from Colonel Lee to the effect that the Chief of Engineers had authorized a Detailed Project Report on the proposed ship channel to Victoria Bluff. Neither Taylor nor Dibert had previously written to Colonel Lee, and there seems hardly any other way that he could have gotten their particular addresses or any other reason that he should have written specifically to them except for interoffice orders from Washington.

It would be impossible, of course, to reconstruct all of the contacts made in Washington by the anti-BASF forces, but the foregoing provides at least the highlights of those events. Franklin Rouse perhaps summarized the activity best when he said: "These people [pro BASF] wondered what happened to them. They were hit by a juggernaut of people with know-how."[13] Figures 1 and 2 provide graphic illustration. The charts are of necessity incomplete as organization charts, but where it became impossible to omit an organization in them, even though that organization played no direct part in the conflict, the name of the person holding office was

FIGURE 1

DEPARTMENT OF INTERIOR AS INVOLVED IN BASF CONFLICT

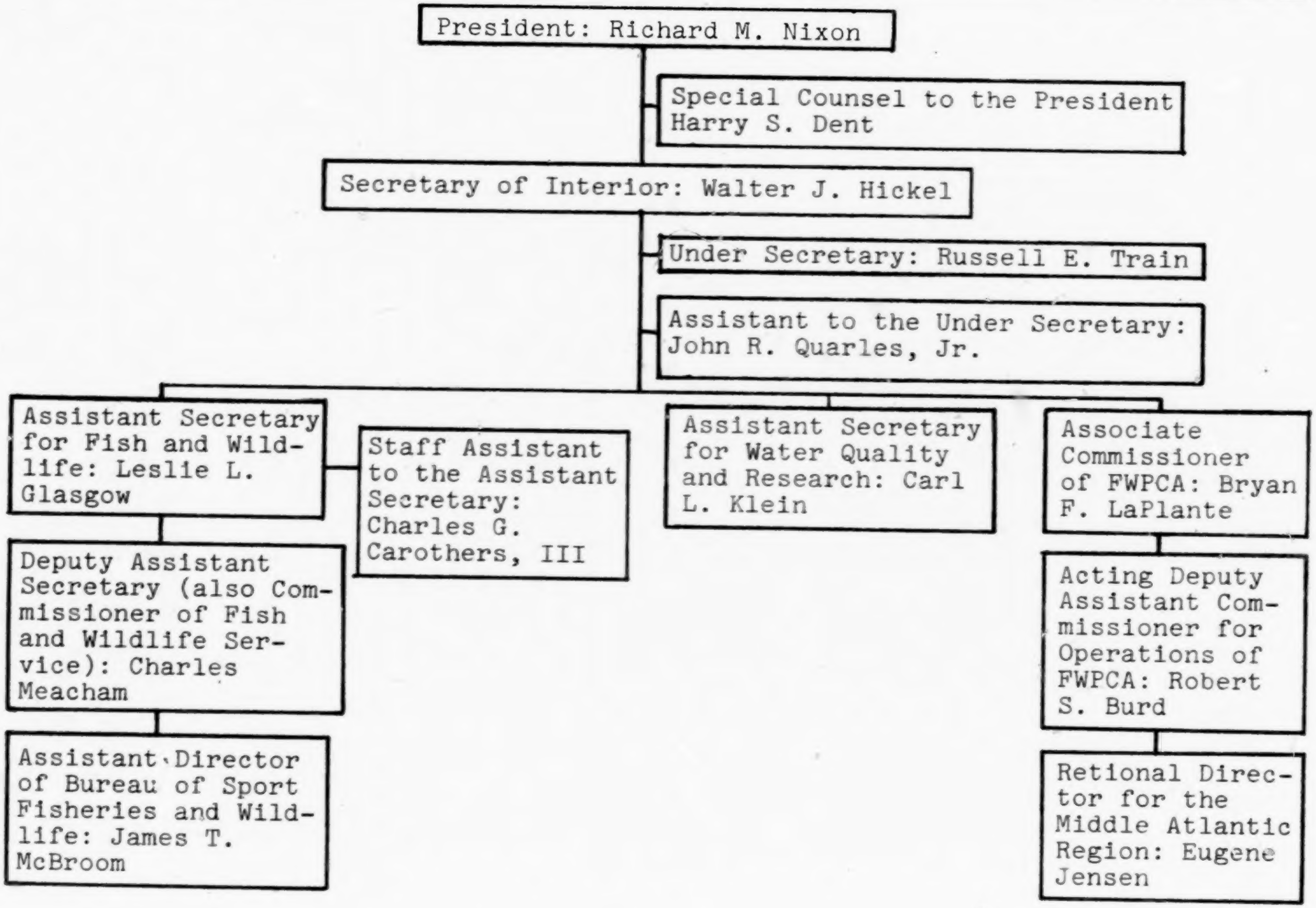
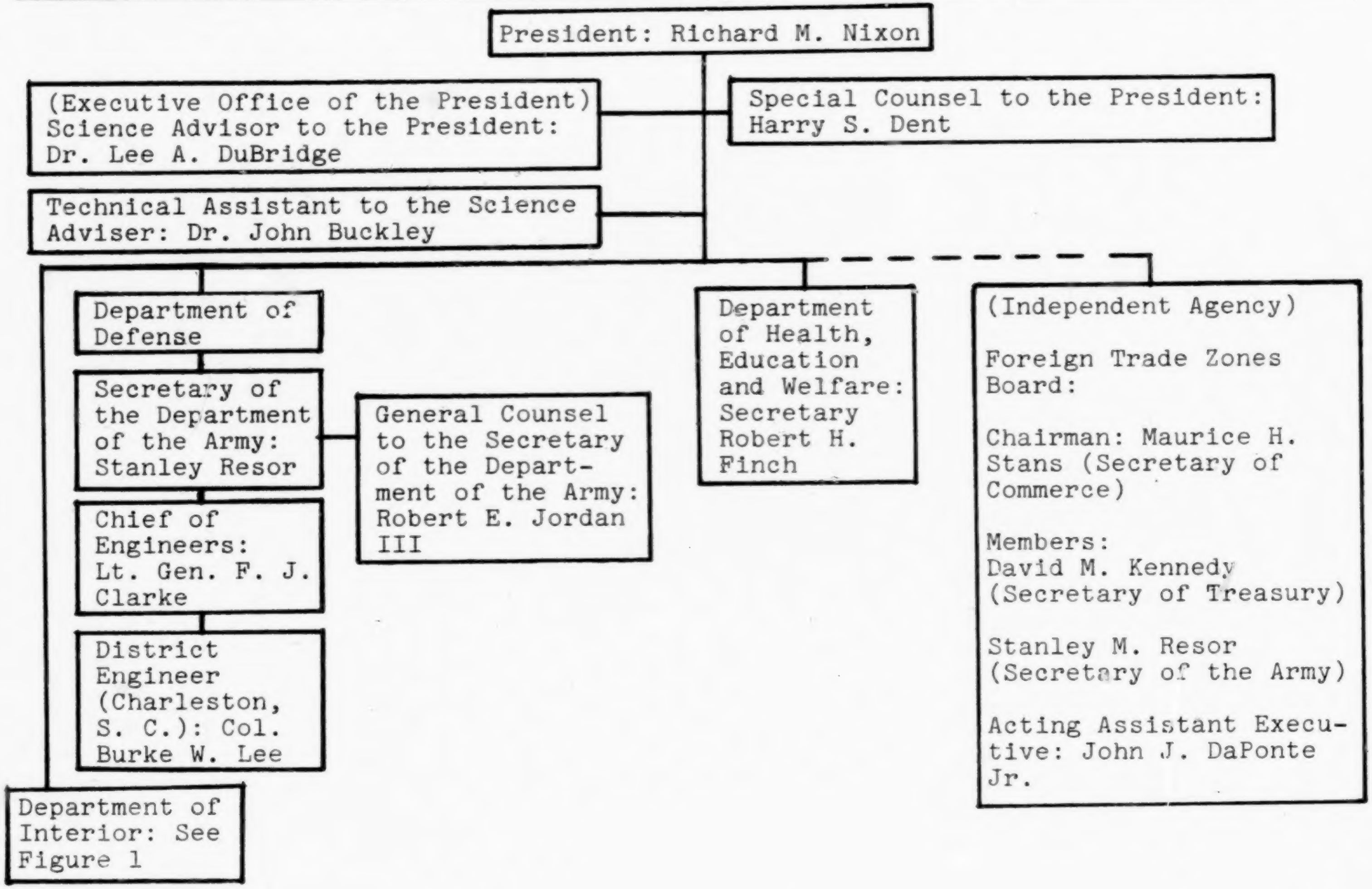

President: Richard M. Nixon
Special Counsel to the President Harry S. Dent
Secretary of Interior: Walter J. Hickel
Under Secretary: Russell E. Train
Assistant to the Under Secretary: John R. Quarles, Jr.
Assistant Secretary for Fish and Wildlife: Leslie L. Glasgow
Staff Assistant to the Assistant Secretary: Charles G. Carothers, III
Deputy Assistant Secretary (also Commissioner of Fish and Wildlife Service): Charles Meacham
Assistant Director of Bureau of Sport Fisheries and Wildlife: James T. McBroom
Assistant Secretary for Water Quality and Research: Carl L. Klein
Associate Commissioner of FWPCA: Bryan F. LaPlante
Acting Deputy Assistant Commissioner for Operations of FWPCA: Robert S. Burd
Retional Director for the Middle Atlantic Region: Eugene Jensen

FIGURE 2

EXECUTIVE BRANCH AS INVOLVED IN BASF CONFLICT


President: Richard M. Nixon
(Executive Office of the President) Science Advisor to the President: Dr. Lee A. DuBridge
Special Counsel to the President: Harry S. Dent
Technical Assistant to the Science Adviser: Dr. John Buckley
Department of Defense
Secretary of the Department of the Army: Stanley Resor
General Counsel to the Secretary of the Department of the Army: Robert E. Jordan III
Chief of Engineers: Lt. Gen. F. J. Clarke
District Engineer (Charleston, S. C.): Col. Burke W. Lee
Department of Interior: See Figure 1
Department of Health, Education and Welfare: Secretary Robert H. Finch
(Independent Agency)
Foreign Trade Zones Board:
Chairman: Maurice H. Stans (Secretary of Commerce)
Members:
David M. Kennedy (Secretary of Treasury)
Stanley M. Resor (Secretary of the Army)
Acting Assistant Executive: John J. DaPonte Jr.

ommitted. If a name is supplied, it means that person was contacted directly on behalf of the anti-BASF forces. Such contacts were often on a personal friendship, rather than merely a citizen-office holder basis.

January, February, and March, 1970, were months of intensive activity in Washington by those opposed to BASF. Charles Fraser summarized the months by saying: "The Madison Hotel in Washington was practically the winter camp of the Hilton Head Island contingent, who fanned out each day to the various offices."[14] Among other things, fanning out each day included having breakfast with Harry Dent (Special Counsel to the President). This would not seem to be too difficult to arrange when one considers that Charles Fraser and Harry Dent had been college roommates. Also present at the breakfast was Elisha Walker (mentioned above). Walker played a role completely disproportionate to the publicity he received. Walker:

> has contributed heavily to American political campaigns over the years, directly, openly, to the various Republican causes. He is very interested in parks, goes on National Parks service junkets and tours and quite some time before the issue was fully joined, after more and more information came out on BASF, and he got reports from Germany, he concluded that he was going to fight, so agreed to contribute funds as necessary. He told me that he had relatively few passions left and fighting BASF had now become his great passion, and that he'd be darned if that was going to spoil this particular area and so he started diligently on this. He had his New York law firms go to work. He had all his various alliances and liaisons at work on it. He set up the meeting with Glasgow.[15]

The payoff came in late March when Secretary Hickel sent his "warning" letter to Hans Lautenschlager. The letter was more than a month in the drafting stage. Eugene Jensen began circulation of the first draft as early as February 19. He said:

> I think that my immediate office was responsible for almost all of the actual arranging of the conferences that were held in initiating an action, or drafting of the first letter that went forward for Secretary Hickel's signature and for explaining and defending why such a letter should go forward.[16]

Available evidence supports Jensen's claim. On March 24, Hickel mailed the letter to Lautenschlager, indicating that the Department of Interior had two Major concerns: (1) Water Quality, and (2) Channel Dredging. He cautioned that the water in the Victoria Bluff area was presently of very high quality and that Interior had the right to intervene and keep it that way because the water quality standards of South Carolina were joint State-Federal standards and could only be changed with the agreement of the Department of Interior. Hickel also cautioned that Corps of Engineers proposals for channel dredging came through his office and he would vigorously oppose dredging which might damage the wildlife of the estuary. A copy of the letter, along with a suggestion that HEW might want to get involved because of the possibility of air pollution, was sent to Secretary of Health, Education and Welfare, Robert Finch. A letter was simultaneously sent to Secretary of the Army, Stanley Resor, notifying him that Interior would oppose any channelization of Port Royal Sound and the Colleton River.

CONCLUSION

It was not yet time for the BASF opposition to sit back and pat each other on the back, but the major objective of their Washington operation was achieved. For all practical purposes, Secretary Hickel's letter was the determining factor in the final decision by BASF to not locate at Victoria Bluff. The fact that BASF was controlled from Ludwigshaven probably helped the opposition, because without exception those interviewed noted that BASF officials thought in terms which regarded high level government statements as definitive and final; they did not understand the operation of Federalism in the United States and attributed power to a Cabinet officer considerably beyond that which he actually has in our system of government. Consequently, when BASF officials from Germany met in New York on April 6, 1970, to determine their response to Hickel's letter, they decided to give up the project rather than fight the U. S. Government. They announced a mere delay in plans at the time, but it seems beyond refutation that the final decision was made on April 6, and that decision was the one desired by the interest groups opposing them.

ENDNOTES

[1] Emerson Mulford, personal interview with Harold E. Albert on Hilton Head Island, S. C., August 9, 1971.

[2] Rufus L. Taylor, personal interview with Harold E. Albert at Otterpoint Farm near Frogmore, S. C., August 6, 1971.

[3] _Ibid_.

[4] _Ibid_.

[5] Dolly Hamby, personal interview with Harold E. Albert in Columbia, S. C., May 15, 1971.

[6] Orion Hack, personal interview with Harold E. Albert on Hilton Head Island, S. C., April 16, 1971.

[7] John Evans, personal interview with Harold E. Albert in Washington, D. C., May 13, 1971.

[8] Orion Hack, personal interview with Harold E. Albert on Hilton Head Island, S. C., April 16, 1971.

[9] John Buckley, personal interview with Harold E. Albert in Washington, D. C., May 17, 1971.

[10] Admiral Rufus L. Taylor, personal interview with Harold E. Albert at Otterpoint Farm, Frogmore, S. C., August 6, 1971.

[11] George Dibert, personal interview with Harold E. Albert on Hilton Head Island, S. C., September 20, 1971.

[12] Stewart R. King, "New Regulations Require Analysis of Discharge," _News and Courier_ (Charleston, S. C.), February 20, 1970, p. 12-B.

[13] Franklin Rouse, personal interview with Harold E. Albert on Hilton Head Island, S. C., September 20, 1971.

[14] Charles Fraser, personal interview with Harold E. Albert on Hilton Head Island, S. C., August 9, 1971.

[15] _Ibid_.

[16] Eugene Jensen, personal interview with Harold E. Albert in Arlington, Virginia, July 21, 1971.

ATTITUDES OF CABIN CREEK RESIDENTS TOWARD WATER RESOURCES DEVELOPMENT

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ATTITUDES OF CABIN CREEK RESIDENTS TOWARD WATER RESOURCES DEVELOPMENT*

INTRODUCTION

The fundamental objective of this study was to determine the significant problems of Cabin Creek area. This investigation also attempted to show the effect of socioeconomic variables on the attitudes of Cabin Creek residents toward water resources development.

The Cabin Creek area consists of small communities lying alongside the stream, which enters the Kanawha River about ten miles east of Charleston, West Virginia. The population of the Cabin Creek area in 1970 was 5,490, a sharp decrease from its boom years of 1910-1940, vividly revealed by the skeletons of aged buildings, many overgrown with weeds and vines. There are few, if any, public services in the narrow hollow, no public sewage or water services or public transportation. A few small grocery stores are available to the people along with a hardware store and a State liquor store.

The Cabin Creek area shared the national and regional pattern of high level of production of coal during World War I and after a post war adjustment continued at a high level during much of the 1920's. However, the depression decade saw output fall to a low until the military production for World War II stimulated the economy. The production of coal reached a new high in the nation during the years 1944 to 1949. Since these years, the production has had an irregular trend. The production level responds to the level of demand. Many factors enter into the changes in the demand for coal from a given area; i.e. competition from other production areas in the United States, competition from other types of fuel, competition from other countries who are producing coal, and the economic fluctuations of the nations of the world. The coal market is very sensitive to these and other factors and coal production can and has changed quite abruptly nationally and in local areas.[1]

In addition to responding to these changes in the economy the people of Cabin Creek were effected by other changes which influenced their way and style of living. World War II had the dual effect of taking many young people into the Armed Forces and creating a greater demand for coal. Mechanization in the coal industry has enabled it to produce more coal while hiring fewer men and has created much unemployment even when the production of coal is increasing. The continuous mining machines were introduced in the 1940's and have been increasingly used during recent years in the larger mines. Varying in size, some of these machines will cost over $100,000 each and can mine as much as eight tons of coal per minute. The use of these machines usually reduces the number of men employed. Thus fewer men can produce more coal. This is one of the major reasons for the decline in the number of people in Cabin Creek during recent years. Smaller mines cannot meet the competition of larger ones and operate mostly in times of great demand and high prices.

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[1] For further analysis see: Ford, Thomas R. The Southern Appalachian Region: A Survey, University of Kentucky Press: Lexington, 1967, Chapter 7.

*This is a modified version of the report which was submitted to the U. S. Army Corps of Engineers, Huntington, West Virginia, November 1972.

As has been indicated, the coal companies not only owned the mines but also in many cases owned the houses the people lived in, the stores the people used to buy their food and clothing, and furnished many of the social services needed by the people. During the past twenty-five or thirty years most of the coal companies have sold their houses and many of the community properties, i.e., tennis courts, swimming pools, recreation facilities, parks, etc. to either individuals or real estate companies. Since the coal companies maintained these facilities in many communities, including the Cabin Creek area, most have fallen into disrepair and are no longer used.

The social structure which developed around the coal camp neighborhood or community quickly disintegrated when the companies changed their role and in many places there is little coherence or identity in the new situation. Living in small and somewhat isolated neighborhoods, the people find themselves with little potential influence at the county seat. The response to their need for better schools, roads, public facilities often falls either on deaf ears or at the end of a long list of priorities in a limited county budget. This sometimes makes it difficult for the people to feel an identification with their homes or neighborhoods and to develop a pride in their living situation. The limited opportunity for jobs in the area forces most of the young people to leave. Cabin Creek shares this problem with the many other similar areas throughout the Southern Appalachian Region. Field studies reveal that there is no over-all organization that coordinates the work in the total Cabin Creek area. Several agencies work in the area and their services are available to its residents.

During the middle 1960's several neighborhood groups were developed under a program called Action for Appalachian Youth. They were effective as long as the program was funded from 1963 to 1965. In most cases these groups have ceased to exist. The Upper Kanawha Valley Improvement Council, Inc. is conducting a program in several neighborhoods and has a concern for the entire Cabin Creek area. While coal miners are well paid for the time they work, many work less than 200 days a year which means that the incomes vary from $4,000 to $6,000 per year which is a relatively small income when a large family needs to be supported. Mining is also a dangerous occupation and even with improved laws the accident and death rates remain relatively high. Occupational hazards, such as the "Black Lung" disease have only recently been recognized as a major problem facing those who work in the mines. Because of the high percentage of older people and of children, the number of people depending upon welfare and food stamps is unusually high. The distance from the upper end of the creek to Charleston, the county seat, with no public transportation presents a problem for some people to use the services that are offered. Beginning with the depression years and extending through the World War II years, including the mechanization of the mining industry, Cabin Creek has maintained a high rate of unemployment. This has had the effect of forcing many young people to leave in search of employment. Some who have remained have been forced onto the welfare roles, especially the older people, mothers with younger children and those who are disabled or handicapped. Living on welfare has become a way of life for many of the people.

The Cabin Creek area tends to be divided into two parts with several small neighborhoods in each part. The dividing line between the two parts is in the Rhonda, Sharon, Miami, Dawes section. From this section to the mouth of the creek many of the people work in Charleston in schools, industrial concerns, government offices or in private business. From this section to the head of the creek most of the people are associated with the mines. In the past mining has been performed up and down the creek, especially strip, drift and slope mining. Today the major mining activity is concentrated in the head of the hollows above Decota and Kayford, and consists of shaft or deep mining. The larger neighborhoods from the mouth of the creek to its head are Cabin Creek, Dry Branch, Rhonda, Sharon, Miami, Dawes, Giles, Coal, Ohley, Eskdale, Leewood, Quarrier, Decota, Carbon and Kayford.

Industries in the Kanawha Valley provide employment for many people living in the Cabin Creek area. Efforts to attract industry have met with only modest success in recent years. There is little hard and factual information that would be the basis for a very optimistic prediction for a larger growth in population in the Cabin Creek area in the near future.

It is difficult to measure the impact of the War on Poverty on the lives of the people living in the Cabin Creek area. The people have participated in a variety of programs sponsored by this governmental effort. Several individual lives have been influenced by participating in Head Start, neighborhood youth corps, working with VISTA workers and sharing in the economic development programs sponsored by different agencies. The field studies done would suggest that beyond assisting these individuals there has been little impact on the economic problems facing the people or on the need for social structures to replace those which existed during the earlier days when the coal companies and the unions provided them. This was not because of lack of effort but largely because the programs were so short lived and often were hastily planned and not followed up. For these reasons the long range impact on Cabin Creek and similar areas was minimal.

Those persons belonging to the United Mine Workers have had their medical cards and retirement benefits which have been an important part of their lives. The United Mine Workers has been a spokesman in dealing with the company. In recent years because of the smaller number of members the United Mine Workers has not had an important effect upon the area as it once had. This has contributed to the lack of social organization in the area that has been mentioned.

DATA AND METHODS

Data for this investigation were obtained from the residents of Cabin Creek, West Virginia. The entire Cabin Creek area was separated into sixteen parts, consisting of 1,402 occupied dwellings. A systematic random sample of every third household was selected and scheduled for interviews. The questionnaire included information concerning attitudes of Cabin Creek residents toward water resource development, and concerning several economic, social and cultural variables.

The interviews were conducted by a group of trained college students under the direction and supervision of personnel from the research and statistics unit of the Department of Employment Security and the Department of Sociology and Anthropology at Marshall University.

The dependent variable studied was attitude of Cabin Creek residents toward water resource development which was measured in terms of sixteen statements. The respondents were asked to indicate whether they agreed, disagreed, or were undecided concerning these sixteen statements. The independent variables considered were: place of residence; employment status; occupational status; place of work; educational attainment; type of industry; age; sex; marital status; organizational involvement; income; type of reading material; type of television or radio programs; type of organizational involvement; and identification with the Cabin Creek area.

The attitudes of Cabin Creek residents were ranked in accordance with the proportion of their agreement on these sixteen statements. Spearman's rank order correlation (r_s) was computed for each table composed of two categories and, for tables with more than two categories, Kendall W was computed. It is consistent to use Spearman's r_s and Kendall W for the same set of data as Kendall W bears a linear relationship to the average r_s taken over all categories (Siegel: 1956:229).[2]

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[2] Siegel, Sidney Nonparametric Statistics for the Behavioral Sciences, New York: McGraw-Hill Book Company, 1956.

FINDINGS AND DISCUSSION

Table 1 contains the ranking of water resource problems by Cabin Creek residents. Ranking highest among water resource problems was "A community improvement program would make this area a more beautiful place to live" (86.30%). The second highest ranking was given to "Do you think that new industry in Cabin Creek would be desirable?" (80.10%) Other resource problems were ranked as follows: the third - "A garbage pickup and sanitary sewer system are needed in Cabin Creek" (71.32%); the fourth - "Pollution is the most serious water problem in Cabin Creek" (70.80%); and the fifth - "Lack of leisure time activity is the most serious problem in Cabin Creek" (70.03%).

In decreasing order the statements least agreed with are: "The railroad and highway bridge across Cabin Creek contributes to the flood problem" (45.22%); "The water supply problem is caused by inadequate wells" (45.22%); "Sufficient retail goods and services are available in the Cabin Creek area" (44.44%); and that "A reasonable solution to the water supply problem would be to develop new resources such as a lake" (43.93%).

Among the causes for water problems, pollution seemed to be the most important while flooding was ranked next in importance. Lack of good water was seen as the least important water problem.

Furthermore, Table 1 illustrates the rankings by residents of two geographical areas: Ohley-Eskdale and Rhonda-Sharon-Miami-Dawes. It is evident that there are significant relationships between rankings on all three categories (W = .9484) and between the two geographical areas (r_s = .9027) at the .001 level. Concerning water resource problems there are some differences in the rankings of the two geographical areas on individual statements but the percentage differences do not seem significant. The two statements that are ranked the highest are: "A community improvement program would make this area a more beautiful place to live" and "Do you think that new industry in Cabin Creek would be desirable?". This seems to indicate that the residents of Cabin Creek desire overall change rather than changes in one specific area of water resource development. In addition, it suggests that improvement be aimed at the causes of the problems rather than at the symptoms of poor watershed development.

The two statements least often agreed with by the total respondents and respondents from the two geographical areas were the availability of retail goods and services and a solution to the water supply problem is to develop new sources of water such as a lake.

Table 2 shows similar rankings by employed and unemployed

TABLE 1.

ATTITUDES OF TOTAL RESPONDENTS

STATEMENT	Total		Ohley-Eskdale		Rhonda-Sharon	
	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree
1. Flooding is the most serious water problem in Cabin Creek.	6	69.77	6	73.24	3	75.61
2. Lack of good water is the most serious water problem in Cabin Creek.	8	62.53	7	70.42	9	60.16
3. Pollution is the most serious water problem in Cabin Creek.	4	70.80	3	78.87	5	71.54
4. Lack of leisure time activity is the most serious problem in Cabin Creek	5	70.03	4	76.06	6.5	70.73
5. The flood problem is caused or contributed to by coal mining.	10.5	56.07	9	66.20	12	49.59
6 The railroad and highway bridges across Cabin Creek contribute to the flood problem.	13.5	45.22	14	49.30	14	46.34
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	12	52.97	12.5	50.70	11	50.41
8. The water supply problem is caused by inadequate wells.	13.5	45.22	12.5	50.70	16	36.59
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	16	43.93	15	46.48	15	37.40
10. The pollution problem is caused by the lack of an adequate garbage pickup.	10.5	56.07	11	54.93	10	51.22
11. The pollution problem is caused by the lack of a sewer system.	9	61.24	10	59.15	8	65.85

TABLE 1. (CONTINUED)

ATTITUDES OF TOTAL RESPONDENTS

STATEMENT	Total		Ohley-Eskdale		Rhonda-Sharon	
	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	3	71.72	8	67.61	6.5	70.73
13. Flood insurance is needed in Cabin Creek.	7	68.73	5	74.65	4	74.80
14. Sufficient retail goods and services are available in the Cabin Creek area.	15	44.44	16	43.66	13	47.15
15. A community improvement program would make this area a more beautiful place to live.	1	86.30	2	81.69	1	84.55
16. Do you think that new industry in Cabin Creek would be desirable.	2	80.10	1	83.10	2	76.42

W=.9484, N=16; X^2=42.6780, 15 d.f., significant at .001 level (one tailed test).

TABLE 2.

ATTITUDES BY EMPLOYMENT STATUS

STATEMENT	Employed		Unemployed	
	Rank Order	Percent Agree	Rank Order	Percent Agree
1. Flooding is the most serious water problem in Cabin Creek.	9	65.52	13.5	40.00
2. Lack of good water is the most serious water problem in Cabin Creek.	7	67.98	8	60.00
3. Pollution is the most serious water problem in Cabin Creek.	6	72.41	3	80.00
4. Lack of leisure time activity is the most serious problem in Cabin Creek	5	73.89	8	60.00
5. The flood problem is caused or contributed to by coal mining.	11	50.74	13.5	40.00
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	15.5	39.41	16	20.00
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	12	49.26	3	80.00
8. The water supply problem is caused by inadequate wells.	14	43.84	13.5	40.00
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	13	45.32	13.5	40.00
10. The pollution problem is caused by the lack of an adequate garbage pickup.	10	58.62	8	60.00
11. The pollution problem is caused by the lack of a sewer system.	8	66.50	8	60.00

TABLE 2. (CONTINUED)

ATTITUDES BY EMPLOYMENT STATUS

STATEMENT	Employed		Unemployed	
	Rank Order	Percent Agree	Rank Order	Percent Agree
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	3.5	74.38	3	80.00
13. Flood insurance is needed in Cabin Creek.	3.5	74.38	8	60.00
14. Sufficient retail goods and services are available in the Cabin Creek area.	15.5	39.41	8	60.00
15. A community improvement program would make this area a more beautiful place to live.	1	86.70	1	100.00
16. Do you think that new industry in Cabin Creek would be desirable.	2	80.30	8	60.00

r_s=.6219, N=16; t=2.9931, 14 d.f., significant at .01 level (one tailed test).

residents of Cabin Creek (r_s = .6219) except on some statements related to water resource development. The employed group stress the need for a community improvement program and development of new industry. But surprisingly the unemployed residents ranked this latter need much lower (60.00%) than did the employed group (80.30%). It can be assumed that unemployed people feel suited only for one occupation (coal mining) or do not feel qualified for jobs in other industries.

The unemployed and employed residents differ substantially on the availability of goods and services in the Cabin Creek area. Only 39.41% of the employed group agreed with the statement while 60.00% of the unemployed group agreed. This is consistent with the fact that the unemployed are less able to afford anything more than the necessities of life which are available in the Cabin Creek area.

Another substantial difference between rankings of the employed residents and unemployed residents is found on the favorability of cleaning out Cabin Creek and doing nothing more. Of the unemployed people 80% agreed that this is a good way to solve the water problems of Cabin Creek while only 49.26% of the employed people agreed with this solution.

Table 3 reveals that there is little difference in the rankings of all occupational categories (W = .7098). A community improvement program and new retail goods and services are ranked significantly higher by all occupational categories. These two problems rank lower in the processing occupational category.

Table 4 shows significantly high correlations between the rankings of different statements and educational level (W = .7138). The group agreed that the need for community improvement and for new industry are the most important problems in Cabin Creek area. The following four statements were agreed with least often by all educational categories: (i) Cabin Creek has sufficient retail goods and services, (ii) that inadequate wells are responsible for water problems, (iii) that cleaning out Cabin Creek and doing nothing more is the solution, and (iv) that new water supplies will solve the problem.

Only one individual statement was ranked differently by levels of educational attainment: "Lack of leisure time activity is the most serious problem in Cabin Creek" (See Appendix). The residents with college education (13+) ranked the statement lower (44.44%) than did the residents with no education (68.75%), the "1 - 4" year category (65.85%), the "5 - 8" year category (68.75%), and the "9 - 12" year category (73.44%).

Table 5 shows that there is no significant difference in the rankings by resident's membership in organizations (r_s = .6862). All groups ranked the need for a community improvement program and the need for new industry as the most important problems in the area. On

TABLE 3.

ATTITUDES BY OCCUPATIONAL STATUS

STATEMENT	Rank Order By Occupational Status						
	Prof., Tech. & Mgr'l	Clerical & Sales	Service	Pro-cessing	Machine Trades	Struc-tural	Misc*
1. Flooding is the most serious water problem in Cabin Creek.	6	7	4	1.5	3	9	3
2. Lack of good water is the most serious water problem in Cabin Creek.	11	4	11.5	4.5	11	9	7
3. Pollution is the most serious water problem in Cabin Creek.	4	9	9.5	11	9	3.5	4
4. Lack of leisure time activity is the most serious problem in Cabin Creek	5	2	3	4.5	9	5.5	7
5. The flood problem is caused or contributed to by coal mining.	13	12.5	8	4.5	14.5	5.5	11
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	14	14.5	13	13	16	15.5	12
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	10	11	9.5	12	9	7	13
8. The water supply problem is caused by inadequate wells.	15	12.5	16	14.5	12.5	13	15
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	16	14.5	14.5	14.5	12.5	15.5	14
10. The pollution problem is caused by the lack of an adequate garbage pickup.	9	9	11.5	16	5.5	12	10
11. The pollution problem is caused by the lack of a sewer system.	8	9	7	8.5	5.5	11	9

TABLE 3. (CONTINUED)

ATTITUDES BY OCCUPATIONAL STATUS

STATEMENT	Rank Order By Occupational Status						
	Prof., Tech.& Mgr'l	Clerical & Sales	Service	Pro-cessing	Machine Trades	Struc-tural	Misc.*
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	3	6	5.5	8.5	5.5	9	5
13. Flood insurance is needed in Cabin Creek.	7	5	5.5	1.5	5.5	3.5	7
14. Sufficient retail goods and services are available in the Cabin Creek area.	12	16	14.5	8.5	14.5	14	16
15. A community improvement program would make this area a more beautiful place to live.	1	2	1	8.5	1.5	1	1
16. Do you think that new industry in Cabin Creek would be desirable.	2	2	2	4.5	1.5	2	2

W=.7098, N=16; X^2=74.5290, 15 d.f., Significant at .001 level (one tailed test).

TABLE 4.

ATTITUDES BY EDUCATIONAL ATTAINMENT

STATEMENT	NONE	1 - 4	5 - 8	9 - 12	13 +
1. Flooding is the most serious water problem in Cabin Creek.	2	2	4	7	11
2. Lack of good water is the most serious water problem in Cabin Creek.	9.5	3.5	9	9	3
3. Pollution is the most serious water problem in Cabin Creek.	4.5	3.5	6	4	6.5
4. Lack of leisure time activity is the most serious problem in Cabin Creek	7	6	6	3	11
5. The flood problem is caused or contributed to by coal mining.	9.5	10.5	10	11	11
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	9.5	14.5	14.5	13	11
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	4.5	7	12	12	6.5
8. The water supply problem is caused by inadequate wells.	14.5	14.5	16	15	15.5
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	12	14.5	14.5	16	6.5
10. The pollution problem is caused by the lack of an adequate garbage pickup.	14.5	8.5	11	10	15.5
11. The pollution problem is caused by the lack of a sewer system.	14.5	10.5	8	8	11

TABLE 4. (CONTINUED)

ATTITUDES BY EDUCATIONAL ATTAINMENT

STATEMENT	NONE	1 - 4	5 - 8	9 - 12	13 +
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	9.5	8.5	3	6	3
13. Flood insurance is needed in Cabin Creek.	4.5	14.5	6	5	6.5
14. Sufficient retail goods and services are available in the Cabin Creek area.	14.5	12	13	14	14
15. A community improvement program would make this area a more beautiful place to live.	1	1	1	1	1
16. Do you think that new industry in Cabin Creek would be desirable.	4.5	5	2	2	3

W=.7138, N=16; X^2=53.5400, 15 d.f., significant at .001 level (one tailed test).

"Flooding is the most serious water problem in Cabin Creek" and "The water supply problem is caused by inadequate wells" those belonging to one or two organizations ranked these statements higher than did those belonging to three or more organizations. Those residents belonging to three or more organizations ranked "The railroad and highway bridges across Cabin Creek contribute to the flood problem" and "The pollution is caused by the lack of an adequate garbage pickup" higher than did residents belonging to one or two organizations. There is no obvious reason why these two groups differ in their attitude toward water problems in Cabin Creek.

There is no significant difference between the rankings of water resource problems by income groups as seen in Table 6 (W = .8446). All of the income groups ranked the need for community improvement higher than other water resource problems. The lower income groups ranked the need for new industry much higher than the higher income groups ($15,000+). Again, all income groups agreed that inadequate wells are not necessarily a cause of water problems, that developing new sources of water will not solve the water problem, and that retail goods and services are not abundant in Cabin Creek area.

Table 7 presents the rankings of water resource problems by respondents according to types of organizations. Overall, the residents rank the sixteen statements similarly regardless of organizational involvement (W = .8877). The only difference on the rankings of the statements is found for "Lack of good water is the most serious problem in Cabin Creek" and "Flooding is the most serious water problem in Cabin Creek." Residents belonging to a church agree more often with the above two statements than do those who belong to a church as well as other organizations.

Surprisingly, in Table 8 there is no significant difference in the ranking of the statements by degree of identification with the area (W = .9042). However, again there are small differences among rankings on individual statements. As usual, all groups had a high degree of agreement on the need for community improvement and the need for new industry. The only exception here is on the "high" identification group agrees less often (68.97%) with the idea of establishing a new industry than did the "low" (81.86%) and the "moderate" groups (79.55%). The "low" identification category agreed with the statement that "Flooding is the most serious water problem in Cabin Creek" more often (77.43%) than did the "moderate" category (60.61%) and the"high" category (51.72%). The "high" identification group agreed more often that "Lack of good water is the most serious water problem in Cabin Creek" (72.41%) than did the "low" (65.04%) or "moderate" (56.06%) group. Furthermore, the "high" identification group was more likely to agree that "Pollution is the most serious water problem in Cabin Creek" (82.76%) than were the "low" (73.45%) and "moderate" (63.64%) groups.

Perhaps the high attachment with the area of the "high"

TABLE 5.

ATTITUDES BY ORGANIZATIONAL INVOLVEMENT

STATEMENT	1-2 Organizations		3+ Organizations	
	Rank Order	Percent Agree	Rank Order	Percent Agree
1. Flooding is the most serious water problem in Cabin Creek.	4.5	71.79	12	50.00
2. Lack of good water is the most serious water problem in Cabin Creek.	8	64.10	9	57.14
3. Pollution is the most serious water problem in Cabin Creek.	4.5	71.79	2.5	78.57
4. Lack of leisure time activity is the most serious problem in Cabin Creek	6	69.74	5.5	64.28
5. The flood problem is caused or contributed to by coal mining.	10	55.90	5.5	64.28
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	14	44.62	9	57.14
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	11	54.36	12	50.00
8. The water supply problem is caused by inadequate wells.	13	47.18	15.5	21.42
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	16	42.56	14	35.7
10. The pollution problem is caused by the lack of an adequate garbage pickup.	12	50.26	5.5	64.28
11. The pollution problem is caused by the lack of a sewer system.	9	56.41	12	50.00

TABLE 5. (CONTINUED)

ATTITUDES BY ORGANIZATIONAL INVOLVEMENT

STATEMENT	1-2 Organizations Rank Order	1-2 Organizations Percent Agree	3+ Organizations Rank Order	3+ Organizations Percent Agree
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	7	68.21	5.5	64.28
13. Flood insurance is needed in Cabin Creek.	3	72.82	9	57.14
14. Sufficient retail goods and services are available in the Cabin Creek area.	15	43.08	15.5	28.57
15. A community improvement program would make this area a more beautiful place to live.	1	87.18	1	85.71
16. Do you think that new industry in Cabin Creek would be desirable.	2	84.62	2.5	78.57

r_s=.6862, N=16; t=3.5297, 14 d.f., significant at .01 level (one tailed test).

TABLE 6.

ATTITUDES BY INCOME

STATEMENT	$2,999. and Below	$3,000. 4,999.	$5,000. 6,999.	$7,000. 9,999	$10,000 14,999.	$15,000. and Over	Un-known
1. Flooding is the most serious water problem in Cabin Creek.	3	4.5	3.5	7	10	6	8
2. Lack of good water is the most serious water problem in Cabin Creek.	10.5	12	6.5	8	8	6	6
3. Pollution is the most serious water problem in Cabin Creek.	6.5	3	3.5	6	3	6	8
4. Lack of leisure time activity is the most serious problem in Cabin Creek	9	4.5	5	4	5	2	4
5. The flood problem is caused or contributed to by coal mining.	6.5	8.5	13	12	11	6	13.5
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	13	14.5	10	16	15	12	11.5
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	8	10.5	11	11	14	12	11.5
8. The water supply problem is caused by inadequate wells.	15	13	16	13	13	14.5	16
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	16	16	14.5	14	16	14.5	13.5
10. The pollution problem is caused by the lack of an adequate garbage pickup.	12	8.5	14.5	10	9	12	5
11. The pollution problem is caused by the lack of a sewer system.	10.5	10.5	8.5	9	6	9.5	10

TABLE 6. (CONTINUED)

ATTITUDES BY INCOME

STATEMENT	$2,999. and Below	$3,000. 4,999.	$5,000. 6,999.	$7,000. 9,999.	$10,000. 14,999.	$15,000. and Over	Un-known
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	4	7	6.5	2	7	6	3
13. Flood insurance is needed in Cabin Creek.	5	6	8.5	5	4	3	8
14. Sufficient retail goods and services are available in the Cabin Creek area.	14	14.5	12	15	12	16	15
15. A community improvement program would make this area a more beautiful place to live.	1	1	2	1	1.5	1	1
16. Do you think that new industry in Cabin Creek would be desirable.	2	2	1	3	1.5	9.5	2

W=.8446, N=16; X^2= 85.9600, 15 d.f., Significant at .001 level (one tailed test).

TABLE 7.

ATTITUDES BY TYPES OF ORGANIZATIONS

STATEMENT	Church only		Church plus Others		Others except Church		None	
	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree
1. Flooding is the most serious water problem in Cabin Creek.	4.5	75.70	4	68.63	8	60.78	5.5	69.10
2 Lack of good water is the most serious water problem in Cabin Creek.	6	71.96	11.5	50.98	9	58.82	10	61.24
3. Pollution is the most serious water problem in Cabin Creek.	3	76.64	7	62.75	3.5	72.55	5.5	69.10
4. Lack of leisure time activity is the most serious problem in Cabin Creek	7.5	68.22	4	68.63	3.5	72.55	4	70.79
5. The flood problem is caused or contributed to by coal mining.	9.5	57.94	13	47.06	7	62.75	11	55.62
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	15	43.93	10	52.94	15	41.18	15.5	44.94
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	11	57.01	11.5	50.98	12.5	50.98	12	51.69
8. The water supply problem is caused by inadequate wells.	13	47.66	15.5	35.29	12.5	50.98	15.5	44.94
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	16	39.25	14	43.14	14	47.06	14	46.07
10. The pollution problem is caused by the lack of an adequate garbage pickup.	12	48.60	8.5	54.90	10.5	52.4	8.5	61.80
11. The pollution problem is caused by the lack of a sewer system.	9.5	57.94	8.5	54.90	10.5	52.94	7	67.42

TABLE 7. (CONTINUED)

ATTITUDES BY TYPES OF ORGANIZATIONS

STATEMENT	Church only		Church plus Others		Others except Church		None	
	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	7.5	68.22	6	66.67	5	68.63	2.5	75.28
13. Flood insurance is needed in Cabin Creek.	4.5	75.70	4	68.63	6	66.67	8.5	65.17
14. Sufficient retail goods and services are available in the Cabin Creek area.	14	46.73	15.5	35.29	16	39.22	13	47.19
15. A community improvement program would make this area a more beautiful place to live.	2	86.92	1	86.27	1	88.24	1	85.39
16. Do you think that new industry in Cabin Creek would be desirable.	1	88.79	2	76.47	2	82.35	2.5	75.28

W=.8877, N=16; X^2=53.2600, 15 d.f., significant at .001 level (one tailed test).

TABLE 8.

IDENTIFICATION WITH PLACE

STATEMENT	Low		Moderate		High	
	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree
1. Flooding is the most serious water problem in Cabin Creek.	3	77.43	7	60.61	10	51.72
2. Lack of good water is the most serious water problem in Cabin Creek.	8	65.04	9	56.06	3	72.41
3. Pollution is the most serious water problem in Cabin Creek.	4	73.45	6	63.64	1.5	8[illegible].76
4. Lack of leisure time activity is the most serious problem in Cabin Creek	5	72.12	5	67.42	7.5	65.52
5. The flood problem is caused or contributed to by coal mining.	10	60.18	10	50.76	11	48.28
6 The railroad and highway bridges across Cabin Creek contribute to the flood problem.	15	48.23	14	42.42	13.5	34.48
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	12	58.41	12	47.73	13.5	34.48
8. The water supply problem is caused by inadequate wells.	16	46.02	13	43.94	12	44.83
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	14	48.67	15.5	39.39	15	27.59
10. The pollution problem is caused by the lack of an adequate garbage pickup.	11	58.85	11	50.00	9	62.07
11. The pollution problem is caused by the lack of a sewer system.	9	63.27	8	56.82	7.5	65.52

TABLE 8. (CONTINUED)

IDENTIFICATION WITH PLACE

STATEMENT	Low		Moderate		High	
	Rank Order	Percent Agree	Rank Order	Percent Agree	Rank Order	Percent Agree
12. A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	6	71.68	3	71.21	5	68.97
13. Flood insurance is needed in Cabin Creek.	7	68.58	4	68.94	5	68.97
14. Sufficient retail goods and services are available in the Cabin Creek area.	13	50.44	15.5	39.39	16	20.69
15 A community improvement program would make this area a more beautiful place to live.	1	88.94	1	82.58	1.5	82.76
16. Do you think that new industry in Cabin Creek would be desirable.	2	81.86	2	79.55	5	68.97

W=.9042, N=16; X^2=40.6890, 15 d.f., significant at .001 level (one tailed test).

identification group causes these residents to notice pollution as a detriment to the area more often than those residents less attached to Cabin Creek. That the highly attached residents agree less often that new industry is desirable than do the "moderate" and "low" categories may further indicate that the "low" category residents are more concerned with making a living in Cabin Creek while the "high" residents are less concerned with economics and more worried about the beauty of the place.

SUMMARY AND CONCLUSIONS

This study reveals that there are few significant differences among the residents of Cabin Creek in their attitudes toward water resource development. The findings of other studies concerning resource development are in contrast with the findings of this investigation. Dasgupta (1967:8) found that education and level of living were significantly related to attitudes toward watershed development.[3] Peterson and Ross (1971:32-3) also found that age, education, organizational membership, level of living, and employment status are significantly related to attitudes toward watershed development.[4] However, they found that type of occupation is not significantly related to attitudes toward watershed development.

The difference between the present study and the other studies mentioned are due to the difference between the characteristics and experiences of the populations studied. It appears that socio-economic and demographic variables do not appreciably affect residents attitudes toward watershed development in Cabin Creek, West Virginia. The fundamental objectives of this study have been to analyze specific problems rather than to assess the overall favorability of watershed development.

The residents of Cabin Creek feel that for the development of their area that only a piece meal approach is not sufficient. They suggest an overall community improvement program as the highest ranking problem and the establishment of new industry as the second highest ranking problem. This suggests that high unemployment and limited job opportunities in the area force many young people to leave their homes in search of work. The third ranked problem, "garbage pick-up and a sanitary sewer system," and the fourth ranked problem, "pollution" suggest that the cleaning of the Creek and the elimination of some of the causes of pollution are closely related to the total development of Cabin Creek.

The people of Cabin Creek are concerned not only with the physical problems that face them but also of the problems that face their social living as is indicated by their ranking of "lack of leisure time activity." It is clear that the residents of Cabin Creek think that an overall development approach to their problem is the best way to proceed. The problems are so interrelated that they must be approached together even if a system of priorities is necessary and desirable.

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[3] Dasgupta, Satadal, 1967. Attitudes of Local Residents Toward Watershed Development. State College, Mississippi: Mississippi State University.

[4] Peterson, John W., Jr. and Peggy J. Ross, 1971. Changing Attitudes Toward Watershed Development. State College, Mississippi: Mississippi State University.

APPENDIX A.

PERCENTAGE OF RESPONDENTS WHO AGREE WITH STATEMENTS CONCERNING WATER PROBLEMS IN CABIN CREEK BY EDUCATIONAL LEVEL

STATEMENT	None	1-4	5-8	9-12	13+
1. Flooding is the most serious water problem in Cabin Creek.	81.25	75.61	69.44	68.92	44.44
2. Lack of good water is the most serious water problem in Cabin Creek.	62.50	70.73	60.91	61.58	77.78
3. Pollution is the most serious water problem in Cabin Creek.	75.00	70.73	68.75	72.88	55.56
4. Lack of leisure time activity is the most serious problem in Cabin Creek	68.75	65.85	68.75	73.44	44.44
5. The flood problem is caused or contributed to by coal mining.	62.50	56.10	59.72	53.10	44.44
6. The railroad and highway bridges across Cabin Creek contribute to the flood problem.	62.50	51.22	44.44	42.93	44.44
7. A reasonable solution to the flood problem would be to clean out Cabin Creek and do nothing more.	75.00	63.41	50.69	50.28	55.56
8. The water supply problem is caused by inadequate wells.	50.00	51.22	42.36	40.67	22.22
9. A reasonable solution to the problem would be to develop new sources of water such as a lake.	56.25	51.22	44.44	40.11	55.56
10. The pollution problem is caused by the lack of an adequate garbage pickup.	50.00	60.98	57.63	55.93	22.22
11. The pollution problem is caused by the lack of a sewer system.	75.00	68.29	81.94	81.92	77.78

APPENDIX A. (CONTINUED)

PERCENTAGE OF RESPONDENTS WHO AGREE WITH STATEMENTS CONCERNING WATER PROBLEMS IN CABIN CREEK BY EDUCATIONAL LEVEL

STATEMENT	None	1-4	5-8	9-12	13+
12 A Garbage pickup and a sanitary sewer system are needed in Cabin Creek.	62.50	60.98	74.30	71.75	77.78
13. Flood insurance is needed in Cabin Creek.	75.00	51.22	68.75	72.31	55.56
14. Sufficient retail goods and services are available in the Cabin Creek area.	50.00	53.66	45.83	41.24	33.33
15. A community improvement program would make this area a more beautiful place to live.	87.50	90.24	86.11	87.74	100.00
16. Do you think that new industry in Cabin Creek would be desirable.	75.00	68.29	81.94	81.92	77.78

AN INTERPRETATIVE ANALYSIS OF THE ECONOMIC AND MATERIAL COSTS OF RESERVOIR CONSTRUCTION*

by

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Multi-purpose reservoirs are presently justified on the basis of cost-benefit analysis. Costs of construction and land purchase are balanced against such benefits as reduced flood damage, improved water supply and increased recreational opportunities. If the above items yield a favorable benefit equation and funds are available, the reservoir is proposed.

Multi-purpose reservoirs may be classified under the rubric of planned social change. Planned social change is defined as a situation in which outside groups or agencies attempt to initiate and carry through developmental programs within specific physical or social system boundaries. The goal of planned social change is to improve the "quality of life" and the "social well-being" of the target population.

Despite policy statements outlined above planned social change as it presently operates in rural areas does not take account of effects on the human population. Merton has shown that in all purposive social action, there are unanticipated consequences. Often times the individual's or agency's concern with the foreseen immediate consequences excludes the consideration of future and other consequences of the same development act (Merton, 1936:901). This paper is concerned with two unanticipated consequences of planned social change, namely change in the economic and material lives of the target population.

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*Paper presented before the Rural Sociology Section of the Association of Southern Agriculture Workers, Atlanta, Georgia, February 5-7, 1973. Respectively Research Assistant, Research Assistant, and Associate Professor, Department of Sociology, College of Agriculture, University of Kentucky, Lexington.

The particular planned social change is the construction of a large multi-purpose reservoir by the Army Corps of Engineers. The reservoir is located in the coal region of Eastern Kentucky in Knott County.

FOCUS OF THE PROBLEM

The manifest intentions of a planned change project cannot include all possible consequences. These "hidden" consequences may be either detrimental or beneficial for the target population. This paper will delineate the nature of such consequences for persons forced to relocate because of the reservoir. Most particularly we are concerned with unanticipated changes in the economic and material well-being of the individuals and the families.

When reservoir projects involve the relocation of families, the laws of eminent domain and just compensation require the establishment of procedures to insure the economic and material well-being of the forced migrants (Kentucky Law Journal, 1970:750). An additional benefit of this paper will be to evaluate the success of the Army Corps of Engineers (the agency responsible for relocation) in achieving the objective of just compensation in one case example.

SOURCE OF DATA

Selection of the Sample

Due to land inundation and highway relocation the construction of a multi-purpose dam and reservoir on the Carr Fork of the Kentucky River required a large number of families and unrelated individuals to be moved. An examination of the records of the Corps of Engineers Real Estate Office showed that a total of 265 relocated families and unrelated individuals were affected. The

Corps maintains a complete case history from first contact and property appraisal to disposition of the final resettlement payment.[1] These records included a recent address and some basic background information. Corps files were used as a basis for contacting respondents.

Development of the Questionnaire

A structured questionnaire was designed to expand the Corps histories and to obtain additional information about the respondents. Information included personal characteristics such as age and sex, socioeconomic characteristics such as occupation, education and income, and attitudes toward the reservoir and toward the programs of the federal government. A large portion of the questionnaire was devoted to life situations, both subjective and objective, of the respondents before and after relocation and the type and extent of changes that relocation produced for the affected persons. Many of the questions were open-ended and interviewers were instructed to record an antedoctal remarks of the respondents.

The questionnaire was pre-tested by interviewing persons being moved in another reservoir project in Kentucky. Both pre-test and interview population were located in the low-income coal regions of Eastern Kentucky.

Collection of Data

The questionnaire was administered through personal interviewing by four graduate students from the University of Kentucky, Department of Sociology, in the summer of 1971. All but 27 of the respondents had remained within the area. Of an original population in 1967 of 265 families and unrelated individuals, 200 questionnaires were completed.

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[1] A few case histories were not complete. Some property owners had not accepted the Corps of Engineers offers and the cases were pending in court.

ECONOMIC CONSEQUENCES OF RELOCATION

Without doubt, economic well-being represents the central interest of most people (Moore, 1963:88). This section of the paper analyzes economic adjustments accompanying forced migration. Specifically, the following empirical areas were analyzed to determine the effect of relocation on the economic situation of the family and unrelated individuals.

1. Respondents general impressions regarding whether their financial situation had improved or worsened as a result of the move.
2. In line with the above, whether or not the move had been responsible for the change.
3. A discussion of which aspects of their financial situation had deteriorated as a result of the move.
4. General changes in their indebtedness level.
5. Respondent reasons for increased indebtedness.
6. An analysis of the persons most likely to experience increased indebtedness as a result of forced migration.

Change in Financial Situation

When questioned about the over-all change in their financial situation before and after relocation, one-third of the respondents answered that it had "worsened." Forty-four percent, or a little less than half responded that it had not changed and over twenty-one percent stated that their financial situation had improved as a result of the move. This question was included as a filter question designed primarily to direct the respondents to this aspect of their life situation. Financial change could be caused by a variety of reasons.

TABLE 1 - Response to the question "Do you feel that your financial situation has changed any since you moved?"

	Worsened	Remained Same	Improved	No Response	Total
Frequency	67	88	43	2	200
Percent	33.5	44.0	21.5	1.0	100.0

We then asked the persons who had indicated that their financial situation had changed, whether this was due to the move (table 2). About 60 percent of the persons whose financial situation had changed for the worse blamed the move. The remaining did not blame the move or did not know. Of the persons whose financial picture had improved, twenty percent cited the relocation as the reason.

In a very general manner, these simple findings suggest that for those persons, relocated due to reservoir construction, the move is more likely to be blamed if the financial situation worsened, and other causes cited if the financial situation improved.

TABLE 2 - Response to the question "If your financial situation has changed, was it because of relocation?"

Response	Frequency	Percent	Total
A) Worsened			67
1) Yes	39	58.2	
2) No	26	38.8	
3) Doesn't know	2	3.0	
B) Improved			43
1) Yes	9	20.9	
2) No	34	79.1	
3) Doesn't know	0	0.0	

TABLE 3 - Response to the question "In what areas has your financial situation changed?"

	Frequency		Percent	
Total (those whose financial situation has changed)	102		---	
A) Worsened	67		65.6	
1) Relocation Related Activities	(20)		(19.6)	
a) no garden at new location		4		3.9
b) higher rent at new location		3		2.9
c) improvements on house or property at new location		6		5.8
d) cost of relocation		1		0.9
e) decrease in business volume at new location compared to old location		4		3.9
f) added cost of transportation to work		2		1.9
2) Non-relocation related activities	(25)		(24.5)	
a) loss or injury of working spouse		7		6.8
b) higher cost of living (inflation)		14		13.7
c) retirement		2		1.9
d) decrease in government assistance (social security, old age pension, etc.)		2		1.9
3) Other (unspecified)*	(22)		(21.5)	
B) Improved	43		42.1	
1) Relocation Related Activities	(2)		(1.9)	
a) garden at new location		1		0.9
b) increase in business volume at new location compared to old location		1		0.9
2) Non-relocation related activities	(33)		(32.3)	
a) increase in government assistance		15		14.7
b) raise in salary		18		17.6
3) Other (unspecified)*	(8)		(7.8	
C) No Response	2		---	
D) Not Applicable (financial situation remained the same)*	88		---	
E) Grand Total	200		---	

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*This item was not asked to those respondents who mentioned their financial situation had not changed.

The next step in the analysis was an attempt to specify in some detail what factors brought about a financial change for the respondents. Responses to the question "In what areas has your financial situation changed?", indicated that many were related to the process of relocation (table 3). Responses shown in table 3 were categorized into relocation related and non-relocation related activities.

About one-third of the persons whose financial situations worsened (20 of 67) reported relocation-related causes. Representative items included the lack of a garden, higher rents, the necessity of more rent and a decrease in business volume at the new locations. On the other hand, only a very small number (2 of 43) whose financial situation had improved cited the reservoir as the cause. These two repondents listed a garden and increased business volume as the causes.

Non-relocation related responses included inflation and injury as leading to a decline in financial situation, while an increase in government benefits and salary led to an improved financial situation. Perhaps a benefit of the reservoir was that many persons learned of available government aid.

TABLE 4 - Response to the question "Did you owe more money than you did before moving?"

	Yes	No	No Response	Total
Frequency	60	138	2	200
Percent	30.0	69.0	1.0	100.0

A good indicator of changing financial situation is the amount of money owed before and after relocation. In the mountain culture a cash economy prevails. The use of credit cards and banks is generally restricted to the middle and upper class persons and the coal industry. We asked the migrants if they owed more money now than they did before relocation (table 4). Sixty or thirty percent of the sample responded yes. Of the sixty persons who said yes, three-quarters traced the indebtness to the relocation (table 5). Our conclusion from this finding is that a small, but significant percentage incurred indebtedness due to relocation. This does not seem important when compared with middle class persons who would expect to borrow money if they moved, but in a subsistence economy any change in financial situation could be devastating.

TABLE 5 - Response to the question "If you owe more money, was it because of relocation?"*

	Yes	No	No Response	Total
Frequency	45	15	2	62
Percent	73.0	24.0	3.0	100.0

*This question was not asked of persons who answered no to the question in table 4.

Relationship Between Indebtedness and Personal Characteristics

This section explores the relationship between indebtedness and selected characteristics of the respondents. Our hypothesis is that certain structural constraints within the population will operate in producing a favorable adjustment to migration. These variables include age of household head, size of family moved from old location, years of residence at old location, income before relocation, and whether the respondent owned or rented at old location.

Tables 6 through 10 present cross tabulations with the above listed variables and increased indebtedness. All the gamma values reported in these tables show either a strong negative or positive association. Gamma's were calculated for all the cross tabulations shown in tables 6-10. This statistic is an approximate measure of correlation using ordinal data.

Age and Indebtedness

Tabel 6 shows the cross tabulation between age and whether or not the respondent attributed his incurred debt to relocation. The gamma of -.486 clearly demonstrates that older migrants were more likely to place the blame for increased indebtedness on relocation. Disruptions in normal routine are more likely to have major repercussions for older people, particularly when it involves money and a move from familiar surroundings.

TABLE 6 - Relationship between age and whether or not relocation was seen as the cause for increased indebtedness

Age	Yes	No
18-44	10	7
≥ 45	33	8

Q = -.436

Family Size and Indebtedness

Table 7 presents the relationship between family size and increased indebtedness. A much greater percentage of smaller sized families attributed their debt to relocation (Gamma = .652). Most likely, this finding reflects the older and retired family shown in table 6. Younger and larger familes would likely be more mobile and not have negative values regarding borrowing.

TABLE 7 - Relationship between family size and whether or not relocation was seen as the cause for increased indebtedness.

Family Size	Yes	No
1 and 2	19	2
3	26	13

Q = .652

Tenure Class and Indebtedness

The cross-tabulation between landowner and tenants and increased debts shown in table 8 indicates that landowners rather than tenants were more likely to place the blame for their increased debt on relocation (Gamma = .306). This finding is not surprising, in that it would be difficult for a land owner to find an equivalent parcel of land in a new location at the same price. Particularly in Eastern Kentucky where flat land brings premium prices.

TABLE 8 - Relationship between tenure class and whether or not relocation was seen as the cause for increased indebtedness.

Tenure Class	Yes	No
Landowner	28	7
Tenant	17	8

Q = .306

Years of Residency and Indebtedness

Tabel 9 shows the relationship between number of years lived at old location and perceived cause of debt. Persons with greater years of residence were more inclined to blame relocation (Gamma = .390). This finding supports the observations by Burdge and Ludtke (1972) that identification with residence was greater for persons who had been there the longest.

TABLE 9 - Relationship between tenure class and whether or not relocation was seen as the cause for increased indebtedness.

Number of years at old residence	Yes	No
1 - 5	11	5
5 - 19	20	9
20	14	1

Q = -.390

Family Income and Indebtedness

Finally, table 10 indicates that respondents with lower income tended to place the blame for their increasing debt on relocation (Gamma = .460). Persons with higher incomes probably have other resources to cope with the problems of relocation and may have received a better settlement from the Corps.

TABLE 10 - Relationship between family income and whether or not relocation was seen as the cause for increased indebtedness.

Family Income	Yes	No
under $4,000	23	5
over $4,000	19	10

Q = .460

The strong association between these five variables and perceived cause of debt are indicative of the fact that those with stronger roots in the community are often those who suffer most. For instance, Cottrell (1951:361) suggests that when a relativity contained community is confronted by a severe economic crisis, those persons most attached to the community will be hit hardest. Cottrell points out that it is the self-employed long-term resident of a community and one with interests in its continuation that are most affected by change.

Likewise, our investigations suggest the conclusions that forced migration as an involuntary disruption of normal life patterns, is much like the economic breakdown of Cottrell's community. It tends to damage at least economically, those who have a greater attachment to their place of residence. Characteristically, we would expect greater attachment from those who own their land and who have lived there most of their productive life. Again, these would be older, long time residents, with fixed incomes, who own their land and whose children have left the family. These are also the persons who would be less perceptive regarding how to get the just government benefits owed them.

Based on the above analysis we concluded that relocation is a differential process. For some, it may be smooth, but these are persons with better incomes who apparently do not have large ties to the location. For some, however, a radical adjustment is necessary and most mountain people do not have the economic and social facilities to cope with such a change.

MATERIAL CHANGES DUE TO RELOCATION

Material changes for purposes of this report include effects on occupation and housing conditions.

Changes in Jobs

Since the majority of the respondents remained in the immediate area, the relocation generally did not affect the respondent's occupation, except for the commuting distance to work. Tabel 11 does show, however, that 7.5 percent had to change employment and 6 percent lost their jobs due to relocation. Although most persons were not affected, the number that were does suggest a problem. In an older population of an economically depressed area, such as Knott County, a forced move may have profound effects. The relocated individual may not be able to afford transportation to what is usually a marginal occupation. Furthermore, age may severely limit the chance of finding a new job. The change agency (Army Corps of Engineers) should ensure that each relocated person has an acceptable job in the new location.

TABLE 11 - Relationship between relocation and changes in jobs.

Changes in Job	Frequency	Percent
Did Not Affect	148	74.0
Did Affect	52	26.0
Closer to Work	(5)	(2.5)
Further to Work	(20)	(10.0)
Change of Employment	(15)	(7.5
Loss of Employment	(12)	(6.0)
Total	200	100.0

Changes in Housing

Table 12 shows comparisons in the quality of housing before and after relocation. Most housing remained at the same level of quality, and there was a definite improvement in some cases. However, as with occupation, some respondents were adversely affected by having poorer quality housing after relocation. Table 13 indicates that this is not a random process. Rather, it is selective. Persons with lower family incomes were more likely to have a lower quality housing after relocation.

TABLE 12 - Comparison between quality of housing before and after relocation.

	Less/Inferior	Same	More/Superior	No Response	Total
Number of Rooms					
Frequency	36	84	78	2	200
Percent	18.0	42.0	39.0	1.0	100.0
Running Water					
Frequency	10	161	27	2	200
Percent	5.0	80.5	13.5	1.0	100.0
Flush Toilet					
Frequency	7	160	31	2	200
Percent	3.5	80.0	15.5	1.0	100.0
Electricity					
Frequency	2	194	2	2	200
Percent	1.0	97.0	1.0	1.0	100.0

TABLE 13 - Relationship between family income and having inferior housing after relocation.*

	Under $4,000	$4,000-9,999	No Response	Total
Number of Rooms				
Frequency	22	12	2	30
Percent	73.3	26.7		100.0
Running Water				
Frequency	9	1	0	10
Percent	90.0	10.0		100.0
Flush Toilet				
Frequency	6	1	0	7
Percent	85.7	14.3		100.0
Electricity				
Frequency	1	1	0	2
Percent	50.0	50.0		100.0

*Analysis in table 13 is based on persons who reported an inferior level of housing as shown in table 12.

Presence of a Garden

Finally, under changes in material well-being we gathered information on the presence and absence of a garden, before and after relocation.[2] The garden is an important part of mountain culture. We suggest that it is roughly equivalent to the suburban "lawn." Migrants who were not able to start a new garden lost an important status symbol. Knott County, like the rest of Eastern Kentucky, has a scarcity of good, level bottom land. Obviously the land expropriated by the Corps was in the more fertile areas of the county. In other words, the displaced population moved to steeper less fertile ground.

TABLE 14 - Summary information on the presence or absence of a garden before and after relocation.

	Frequency	Percent
Garden: Before and After	66	60.0
Garden: Before Only	44	40.0
Not Applicable*	90	---

*Those with no garden before and after (N = 86) and those with garden: after only (n = 4) were excluded from the analysis.

There were 110 respondents who had a garden before relocation. Of these, 44 (40 percent) no longer had a garden at their new location. The frequency with which respondents cited the lack of a garden throughout the interview suggests that it represented an important part of their economic and material well-being. Growing and the consumption of homegrown products may not be important to the middle class culture, but it supplements a sparse income within the mountain culture.

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[2] The interviewers were impressed by the number of times the lack of a garden was mentioned as a complaint about the present home site. These complaints were volunteered at the onset of the interview before any specific question relating to property was asked.

SUMMARY

This paper has presented data on selected aspects of changes that occur for families and individuals forced to migrate due to a multi-purpose reservoir. The information deals with changes in the economic and material situation of the migrants. Specifically we report changes in perceived and actual financial well-being, changes in jobs and the quality of housing at the two locations. Limited information was presented on the importance of "the garden" in the mountain culture.

Among major conclusions the authors suggest that the effects of the relocation were both random and selective. It was random in the sense that the solutions of economic and material problems was left to the migrants. Costs incurred from the relocation process were not covered by reimbursements. Therefore, the migrants had no alternative but to utilize their own resources. In other words, the quality of living at the new location was improved for some, while for others, it was not.

Secondly, these data suggest that improvement in the quality of life as measured by economic and material well-being was not random. Preliminary analysis shows that respondents who are more likely to be the victims of a lower quality of life after relocation were landowners, older families with 1 or 2 members, persons of lower incomes and persons who were long time residents of the area. These persons are likely to have little prior contact with the government, nor are they likely to be familiar with pricing mechanisms, a dimension which received little socialization in the mountain culture.

According to the laws of eminent domain and just compensation, privately owned land condemned by the government for public projects must be bought at an honest and fair price. Court interpretations have unanimously agreed that the law of eminent domain is fully constitutional. For the sake of the public good, it has been ruled that private property must be relinquished. However, the courts have not fully agreed on the meaning of "just compensation." The dilemma centers around the question of the worth of an individual's property. On the one hand, does it have an intrinsic or objective value, or, on the other hand, can the value of property only be measured in reference to its worth to the individual? The question has been put aside by the courts and change agencies alike through the use of appraisal values as benchmarks in determining the worth of property (Kentucky Law Journal, 1970). However, what both have failed to consider are the added economic expenses of relocation. As these data show, a substantial portion of the respondents find that the very activity of relocating involves hidden costs. These costs, ranging from renovation of a new home to suit individual tastes to the absence of a garden to defray the costs of store-bought foods, are real and often difficult economic adjustments to make.

The concept of "just compensation" was meant to achieve equity in a situation where property is involuntarily sold. If, during the process of relocation, some forced migrants fare economically better than others, the law becomes unequally applied. It is therefore necessary that change agencies not only include property purchased by necessity in the cost-benefit ratio, but also other costs that have a direct affect on the welfare of the target population.

In conclusion, the authors, upon examining the laws of eminent domain and just compensation, and in consideration of the involuntary nature of relocation connected with this and many other types of planned change, are of the opinion that it is the responsibility of the change agency, such as the Corps of Engineers, to adequately ensure, through a proper resettlement program that not only the letter but also the spirit of the law be followed.

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EXPECTATIONS TOWARD PUBLIC FORESTED LAND - A CASE STUDY AT STATE COLLEGE, PENNSYLVANIA[1]

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ABSTRACT Expectations of the general population toward public forested recreation areas were explored for their usefulness in natural resource planning. There were four classes of expectations identified based upon environmental attributes dealing with quantity and quality: (1) no (5.7%); (2) low (5.0%) - development oriented; (3) medium (56.4%) - development oriented, but still concerned about the environment, and (4) high (32.9%) - wilderness oriented. Results indicate that 89% of the public is concerned about maintaining environmental quantity and quality on public forested land.

Attitudinal and demographic variables were examined to isolate those important in the formation of expectations. Variables related to direct experience were particularly important. Results suggest the importance of educational programs designed for learning by doing, expecially during adolescence. In as far as planning is concerned, the data suggest administrative programs designed to reach individuals at several expectation levels. The primary implication for land use planning is that not all areas need to be of the wilderness quality. In fact, the majority of the facilities provided by land managing agencies can be of reasonable quantity and quality and have a certain amount of development on the areas as long as it is congruent with the natural environment.

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INTRODUCTION

With increasing population and industrialization, pressure is and will be put on natural resources. As a result, public forested recreation areas will have to be managed more effectively so that they can be used now and preserved for future generations without a loss in quantity and quality. Only when there is cooperation among those who use, develop, and administer resources and a change in life style from consumption to wise use, will environmental problems, that affect society's well being and existence, be solved (Borton and Warner, 1971: 302-305 and Stapp, 1971: 264-266). The public should be involved in the decision making process to help increase cooperation and change life styles (Schwartz, 1968a, 1968b, 1970a, and 1970b). The public, to engage in this decision making process, should be taught to weigh alternatives wisely and make their selection based upon present and future needs (Schoenfeld, 1968: 4).

The general population has in the past and will in the future affect administrative policy and programs through resource use and public opinion, so it is important that natural resource agencies be cognizant of the general public's disposition (thought and behavior) toward the natural resource base. In the past, there have been conflicts among members of the general population over resource use. When the position of the public is understood, managing agencies will be better able to set priorities on use so that the greatest good will fall to the greatest number. This type of information also offers a method for effectively answering questions of accountability against economic or political interests who want the resource managed for a particular purpose. When variables that are important in the formation of the general population's position are understood, management agencies and the public will be able to engage in educational programs that will help increase cooperation and change life styles. Such educational programs will help managing agencies more effectively achieve their objects and the general public gain more from their recreational experiences by coming to a fuller understanding of their environment.

There have been many types of measurement systems devised to assess the disposition of an individual. One of the most viable areas of methodology is environmental perception, that is, an awareness of environmental attributes that are sensory orientated. The basic assumption underlying this method is that the world cooperates with the individual by conforming to his anticipations (McInnis, 1968). The unique feature of this type of measure is that it gives insight into the codification of reality.

Expectations, "anticipated encounters", have been found to correlate highly with both thought and action (Cardozo, 1965; Gruen and Zigler, 1968: 350-351; Mintz, 1972: 11, 17-19; Murray, 1969; Spector, 1956). Perception is a selective screen which conditions thought and behavior, and is therefore, an ultimate definer of reality (McInnis, 1968). Expectations are the product of the perception process. One of the basic factors lacking in this research area is the isolation of important variables in the formation of expectations. This is an extremely important issue with regard to the application situation because once the formation of expectations are understood, then programs can be designed to better implement management objectives (Wilkinson, 1969: 29, 39-41) and educational programs (Erickson, 1970).

To better understand the relationships between the general population and expectations, a case study was undertaken to (1) identify the position of the general adult population with respect to selected environmental attributes of public forested land and (2) determine the relationships of selected demographic and attitudinal variables to an individual's expectations.

METHODS

Sampling and Data Collection

The area in the vicinity of State College, Pennsylvania, was selected as the study site because it is a rapidly growing university community with many of the problems of an urban environment, even though it is located in rural Pennsylvania. A cross section of a general population, like in the State College area, represents a greater diversity of opinion than in an area with a more homogeneous urban or rural environment (Dynes, 1956).

The following 12 townships around State College were selected to achieve a rural-urban mix: Benner, College, Ferguson, Half Moon, Harris, Huston, Patton, Potter, Spring, Taylor, Union and Worth. A random sample of 170 was selected from the Centre County tax records and The Pennsylvania State University Student Directory. An introductory letter was sent to these individuals asking them to participate in the study, and a follow-up contact was made to determine their interest. Of these, 153 (90.0%) were personally interviewed using a semi-structured interviewing technique (Harvey, 1970). This produced 140 (91.2%) usuable interviews for analysis.

Typology

Expectations were defined in this study as anticipated encounters with environmental attributes of local (26 miles radius) public forested land. To develop a classification system of expectations, a pilot study was undertaken to investigate what environmental attributes are used to evaluate the worth of a recreational experience. Six basic elements were isolated: (1) number of visitors; (2) wildlife; (3) habitat; (4) smell; (5) sound; and (6) development. This list is not exhaustive but only suggestive of an initial effort to establish a set of criteria.

Literature indicates that expectations about public forested land falls along a wilderness-development continuum (Cardozo, 1965; Hendee et al., 1968; Lime, 1971; Lime and Cushwa, 1969; Lucas, 1964; Sonnenfeld, 1966 and 1967; Spector, 1956). This information was used to help interpret the results in the formation of operational definitions for a typology.

Open-ended questions were also used in a follow up survey but the questions were restricted to the six elements isolated in the preliminary interview. There were four basic levels of expectations identified from the analysis of responses: no, low, medium, and high (Table 1, IV). A problem encountered in the development of a typology was finding relevant definitions for the attributes. This was solved by allowing the individual to respond in a specific way. Responses that were alike (response set) were separated into three or four categories. The similarities and differences between response sets were then used to build a general typology. This is an extremely delicate process and may best be handled in the future with statistical techniques, such as Q or cluster analysis.

When consistency among attributes were examined, it was found that there was a high degree of homogeneity among those individuals who wanted to see few people, have quantity, quality, and diversity of wildlife and habitat, natural smells and sounds, and little development, which indicates high expectations with regard to environmental quantity and quality (Table 2D). There was also consistency at the development end of the continuum. These individuals would tolerate more people, less quantity, quality, and diversity of wildlife and habitat, more unnatural smells and sounds, and more development (Low; Table 2B). There were two other conditions which indicated high consistency among environmental attributes. These were the individuals who had no expectations (None; Table 2A) and those who had moderate feelings (Medium; Table 2C). Natural divisions in the responses and consistency among attributes were used to develop a typology that measures expectations with regard to environmental quantity and quality toward public forested recreation areas. The unique feature of this typology is that it relates the biological aspects of management to expectations.

Variable Types

Due to a sparcity of empirical literature about expectations, attitudinal and demographic materials were reviewed to identify variables for exploration. Previous studies have shown that there are four major types of variables: attitudinal, social, adolescent experience, and functional perspective.

attitudinal variables

The variables that characterize the attitudes of an individual are what he knows and how he uses this knowledge (cognitive component) and how he feels (affective component), and is predisposed to act (action tendency component) (Krech et al., 1962; Katz and Stotland, 1959). Bloom et al. (1956) and Krathwohl et al. (1964) have developed typologies to assess these complex variables (Tables 1,I; 1,II; and 1,III). These typologies were employed in this study in terms of an open-ended interview approach about public forested land.

social variables

Social variables are the conditions or circumstances that are not under direct control of cognitive processes. These variables limit or inhibit the expression of attitudes. Knowledge about the underlying factors that influence social variables is limited, but research by Barker (1963) has shown controller elements are the components that aid in the understanding and management of a situation. He has also found that the primary characteristic of any situation is its consistency through time and space. Sonnenfeld (1966 and 1967) has added much to the knowledge about these variables by making several of the variable types more explicit, that is, residential status, sex, marital status, age, and occupation (Tables 1,VI; 1,X; and 1,XI).

adolescent experience variables

Adolescent experience refers to those variables that are important in the formative years (6-18 years of age) of youth. These variables include type of residence, most important type of recreational activity, and background factors (Tables 1,XIII and 1,XIV). Sofranko and Nolan (1970) and Bond and Sendak (1970) have stressed the importance of adolescent experience in determining participation in recreation as an adult.

functional perspective variables

Functional perspective variables add context to the recreational experience (Katz, 1960). These variables provide insight into the factors that influence decision-making processes and are cognitive processes that modify decisions through selection. There are three basic types of these variables: meaning, motivation; and style of selecting situational alternatives.

Meaning is an important element because it provides insight into the decision-makers frame of reference. Gibson (1950) has developed an operational model to describe meaning of an object (Table 1,VII).

Motivational elements are important because they provide insight into the factors that stimulate and stabilize behavior. Needs and habits are the two interactive elements of motivation. Needs are the stimulators and habits are the stabilizers. Maslow (1943) has developed a scale for evaluating needs (Table 1,IX). There is little quantitative information about habits so they were evaluated using subjective measures.

Selection style is important because it influences which alternative is chosen. Bettman (1971) and Kernan (1968) have developed typologies for evaluating selection styles. When Lime's (1971) awareness taxonomy was used in conjunction with Bettman's and Kernan's typologies, a congruent system for evaluating selection styles was developed (Table 1, XII).

RESULTS

A multivariate analysis framework was used. Principle component and Varimax Methodologies were used to reduce the effect of interrelationships and to conceptually reduce the number of variables within a variable type (Blalock, Jr., 1960: 149-152). The interrelationships among the variables within a factor were examined using cross tabulation. Representative variables from each of the factors were then used in a cross tabulation (Chi square) framework to isolate significant variables that are related to an individual's expectations toward public forested land. Relationships described were those whose results deviated significantly from chance expectations (expected frequences). Significance was determined by large cell Chi square values or marked differences between cell and marginal percentages.

Proportion of the Public Who Had No, Low, Medium, or High Expectations Toward Environmental Quantity and Quality of Public Forested Land

Of the general population, 5.7% had no expectations, 5.0% had low expectations, 56.4% had medium expectations and 32.9% had high expectations (Table 3). When reasons for expectations were explored, it was found that those who had (1) no expectations give lack of experience as their reason (100.0%), (2) low expectations give convenience (83.0%) or need for special facilities (16.0%) as their reason (1.0% miscellaneous), (3) medium expectations give convenience and environmental concerns (75.0%) or need for special facilities and environmental concerns (20.0%) as their reason (5.0% miscellaenous), and (4) high expectations give environmental concerns (93.0%) as their reason (7.0% miscellaneous). Results indicate that 89% of the general population is concerned about development and its influence upon the forest environment. Approximately 1/3 of the general population (high expectation) expected the land to be in the state of wilderness and to have the highest quantity and quality of the natural resources possible. Another 56% of the general population (medium expectations) expected the land to be developed for convenience, but this development has to be congruent with the natural environment and ensure environmental quantity and quality within the moderate constraints of the natural resources.

Attitudinal Variables

From the factor analysis of the attitudinal variables, that is, the cognitive, affective, and action tendency elements, only one important dimension was isolated (Table 4). When the relationships among the attitudinal variables were examined, five major types of score patterns emerged: (1) all low component scores; (2) low cognitive, high affective and low action tendency scores; (3) low cognitive, high affective, and high action tendency scores; (4) all high component scores; or (5) high cognitive, high affective, and low action tendency scores (Table 5).

Since there were no clearcut relationships among the score patterns, all three elements were used to explore the relationships among the attitudinal variables and expectations. Using a multivariate cross-tabulation framework, no significant interactions were found so univariate tables were used to describe significant relationships. Only the cognitive variable was consistently related to expectations (Tables 6-8). Those who were able to evaluate cause and effect, especially in terms of established criteria, tended to have wilderness expectations, while those who could not had no, low, or medium expectations. These results stress the importance of understanding cause and effect relationships in achieving a higher quality recreational experience.

Social Variables

The variables that were explored with regard to social conditions were (1) residential status; (2) sex; (3) marital status; (4) age; and (5) occupation. From the factor analysis of these variables there were two important dimensions identified (Table 9). One dimension was related to sex and the other to residential status, age, and marital status. Occupation was deleted from the analysis because it was significantly related to both factors. Since sex is the only variable that represents Factor 1, its distribution will not be discussed because it will be used in the analysis with expectations (Table 10). The relationships among the variables of the second factor, that is, residential status, age, and marital status, indicated that individuals tended to be a non-resident, younger, and single or a resident, older and married (Table 11). Age was selected as the variable to represent Factor 2. When the relationships among sex, age, and expectations were examined, a significant interaction among these variables was found. Those who (1) had no or low expectations were usually young females and (2) had high expectations were usually young males, indicating the importance of sex and youth in polarizing opinion (Table 12). Age (or experience) seems to mellow expectations.

Adolescent Experience Variables

Size of community, membership in a conservation organization, most important type of recreational activity, occupation of father (or guardian) and mother (or guardian), and educational attainment of father and mother were the adolescent variables explored. Three important dimensions were isolated via factor analysis (Table 13). The first dimension was characterized by occupation and educational attainment of father (or guardian). The relationships among these variables indicated that those who fathers' were blue collar usually had a high school education or less and those whose fathers' were white collar usually had some college training (Table 14). The occupation of mother (or guardian) was the variable that was related to Factor 2. Since the occupation of mother is the only variable that represents this factor, its distribution will not be discussed because it will be used in the analysis with expectations (Table 15). Education of mother and membership in a conservation organization were deleted from the analysis because they were significantly related to more than one variable. Examination of the third factor, that is, size of the community and the most important type of recreational activity, revealed that those who were from rural areas usually participated in a remote type of activity and those who were from urban areas participated in a non-remote type of activity (Table 16). Occupation of father and mother and most important type of activity were used to examine the relationships between adolescent experience and expectations. No significant interactions were found but univariate analysis indicated that those who had (1) no or low expectations had participated in non-remote activities; (2) medium expectations had fathers who were usually blue collar; and (3) high expectations had participated in remote activities and had fathers who were usually white collar (Tables 17, 18, and 19). Direct experience and life style seem to be the two factors that influenced the formation of expectations.

Functional Perspective Variables

When the functional perspective variables, that is, meaning, habits, needs, and selection process were factor analyzed, three important dimensions were identified (Table 20). The first factor was related to an emotional-symbolic meaning dimension. The second factor was related to a concrete-use dimension. And the third factor was associated with a selection process-need dimension. Habits (learned behavior) were deleted from analysis because they were significantly related to both Factors 1 and 2. When the relationship between the variables of Factor 1, that is, emotional and symbolic meanings were examined, a direct relationship between the neutral and positive categories of both variables was found (Table 21). Examination of Factor 2, that is, use and concrete meanings, revealed a direct relationship between the neutral and positive categories of both of these variables (Table 22). From an examination of Factor 3, that is, selection process and needs, it was found that those who had a safety, identification, or an esteem need for the land were usually less familiar with public forested land and selected alternatives on the basis of payoff. Those who had a self-actualization need for the land usually were more familiar with the land and selected alternatives on the basis of consequences (Table 23). Concrete and emotional meanings and selection process were the variables that were used to examine the relationships between functional perspective and expectations. There were no significant interactions so univariate tables were used to describe signiciant relationships. Those who had (1) no or low expectations usually had neutral or negative concrete and emotional meaning scores and usually selected alternatives on the basis of chance, (2) medium expectations selected alternatives on the basis of payoff; and (3) high expectations usually had positive concrete and emotional meaning scores and usually selected alternatives on the basis of consequence (Tables 24, 25, and 26). To gain more from the recreational experience, decisions should be made on a more rational basis and the meaning of the experience should be of a more multi-dimensional nature.

IMPLICATIONS

Any conclusions derived from this study are meant to be illustrative, not defendative. Relationships between expectations and an individual's disposition (thought and behavior) are documented well in literature. The primary unanswered question is, "What are the important variables that determine differences in expectations?" Results of this study indicated that there were four classes of expectations: (1) no (5.7%); (2) low (5.0%) - development oriented; (3) medium (56.4%) - development and environment oriented; and (4) high (32.9%) - wilderness oriented. Those who had (1) no expectations usually lacked experience with public forested land, did not have an ability to evaluate causes in terms of practical solutions, were usually young, non-resident, single females from urban areas, participated in non-remote activities during their youth, had neutral and negative concrete, use, emotional, and symbolic meaning scores, and selected alternatives on the basis of change; (2) low expectations were oriented toward convenience, did not have an ability to evaluate causes in terms of practical solutions, were usually young, non-resident, single females from urban areas, participated in non-remote activities, had negative and neutral concrete ,use, emotional, and symbolic meaning scores, and selected alternatives on the basis of chance; (3) medium expectations were oriented toward convenience and environmental concerns, did not have an ability to evaluate causes in terms of practical solutions, had fathers who were blue collar workers, selected alternatives on the basis of payoff, and had a social need for forested land; and (4) high expectations were oriented toward environmental concerns, had an ability to evaluate causes in terms of practical solutions, were young, non-resident, single males, were from rural areas, participated in remote activities during their youth, had fathers who were white collar workers, had positive concrete, use, emotional, and symbolic meaning scores, selected alternatives on the basis of consequences, and had a self-actualization need for the land.

Lack or benefit of life's experiences in the pursuit of resources were instrumental in the formation of expectations. Variables that limited interactions between direct experience and resources seem to be the percipitating cause of no, low, or medium expectations, especially during adolescence. The primary implication is that to increase the quality of the recreational experience, educational programs need to be designed to overcome the limiting variables so that an individual can understand the relationship between himself and the natural environment. Such programs should be designed especially for youth. Only when the individual is able to come to a fuller understanding of the natural environment will he be able to realistically and thoughtfully utilize his environment in such a way that will enhance resources now and for future generations.

Since a majority of the general population was oriented toward convenience and environmental quantity and quality, the implication for land use planning is that a majority of public recreational areas should have development such as trails and camping areas for convenience, but the development should be congruent with the natural environment. A smaller proportion of the public land should be preserved for the wilderness experience. With such multi-purpose facilities, the individual can seek the type of facility desired.

The public seems to be aware of basic relationships between man and his environment. The implication is that the management agency and the public can successfully engage in dialogue that will increase cooperation and change life styles. The result would be a harmonious relationship between man and his environment that would satisfy present and future needs for natural resources.

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APPENDIX

Table 1. Operational and text definitions

I. Action tendency element - The disposition to take action, positive, or negative, toward and object which are incorporated in an individual's attitude toward that object (Krech et al., 1962: 177; Raths et al., 1966:30).

   A. High action tendencies - Those responses or behaviors that indicate action of a frequent (once a week or more) nature (Sonnenfeld, 1966: 74-75).

   B. Low action tendencies - Those responses or behaviors that include action of an infrequent (less than once a week) nature. It also includes responses or behaviors that indicate only a tolerance of, an indifference to an existing condition, or a willingness to act in the future (Sonnenfeld, 1966: 74-75; Tombaugh, 1971: 75).

II. Affective element - The feelings, positive or negative, toward an object which are incorporated in an individual's attitude toward that object (Krathwohl et al., 1964: 176-185; Krech et al., 1962: 178; Raths et al., 1966:30).

   A. High affective element - Those responses or behaviors in which an individual is committed enough to an object to seek to convert others to his cause or build a philosophy of life based upon his commitment.

   B. Low affective element - Those reponses or behaviors in which an individual is committed enough to an object to identify with it. It also includes those responses or behaviors in which an individual is indifferent to or committed enough to an object to tolerate its presence, attend to it in spite of competing stimuli, or to gain satisfaction from working with it.

III. Cognitive element - The beliefs about an object which are incorporated in an individual's attitude toward that object (Krech et al., 1962: 178; Raths et al., 1966:30).

   A. High cognitive element - Those responses or behaviors that indicate an ability to evaluate cause and effect relationships in terms of established criteria (or at least an ability to offer practical solutions).

   B. Low cognitive element - Those responses or behaviors that indicate a recall of knowledge, a use of knowledge without relating it to other materials, an ability to transfer knowledge, or an ability to isolate the interacting elements in a relationship.

Table 1 (continued)

IV. Environmental attributes

A. Number of visitors

	Number of people seen/trip (Highest tolerable number)
None	No expectations
Low	21+
Medium	11-20
High	0-10

B. Wildlife (Related to number in population and food supply available)

1. Quantity

	Number of particular species
None	No expectations
Low	Small number
Medium	Medium number
High	Large number

(Also includes relationships between big and small game in terms of percentages, where appropriate).

2. Quality

a. Health

None	No expectations
Low	Not survive winter
Medium	Survive average winter
High	Survive hard winter

b. Body size

None	No expectations
Low	Small
Medium	Medium
High	Large

3. Diversity

	Number of species
None	No expectations
Low	0-5
Medium	6-11
High	12+

C. Habitat (Related to number in population and soil, water, and climate conditions available)

1. Quantity

	Number of particular species
None	No expectations
Low	Small number
Medium	Average number
High	Large number

(trees, shrubs, and/or herbs and also includes relationships among these categories in terms of percentages, where appropriate)

2. Quality

a. Health

None	No expectations
Low	Will not survive under stress
Medium	Survive under moderate stress
High	Survive heavy stress

b. Size

None	No expectations
Low	Small
Medium	Average
High	Large

3. Diversity

	Number of species
None	No expectations
Low	Small number
Medium	Average number
High	Large number

D. Smell

None	No expectations
Low	Entire air slightly unnatural smell
Medium	Some areas natural some not
High	Only natural smells

E. Sound

None	No expectations
Low	Some unnatural sounds everywhere
Medium	Some areas natural but some not
High	Only natural sounds

F. Development

None	No expectations
Low	Intense development such as permanent buildings and areas for the use of motorized vechicles
Medium	Moderate development such as trails and camping areas
High	No development

V. Forested Land-A dense growth of trees and underbrush covering a tract of land.

VI. Marital Status
Single-Individuals who are not presently married or living with their spouse (includes widowed, divorced and separated)
Married-Residual

VII. Meaning--The importance of land and water resources to an individual. There are four types of meaning.

A. Concrete meaning - Tangible results of the land being there in its present condition--grass to walk on, water to swim in, etc.--real.

B. Use meaning - Utility of the land being there in its present condition--for recreation, watershed, etc.--rational.

C. Emotional meaning - Apparent intangible results of the land being there in its present condition--aesthetically pleasing, invigorating, etc.--emotional.

D. Symbolic meaning - Intangible results that represent more than is seen; represents or suggests something else--freedom, by-gone era, etc.--abstract (Gibson, 1950).

Meaning was evaluated using a three point negative, neutral, and positive scale.

VIII. Natural resources - All endowments of nature outside of man himself, both actual or potential. For practical purposes: soil, water, plant and animal life, including its life processes, climate, and minerals (Shomon, 1960:2).

IX. Needs - The initiating and sustaining force of behavior.

There are five types of needs.

A. Physiological, that is, hunger, thirst.

B. Safety, that is, security, order.

C. Need to belong or be loved, that is, affection, identification

D. Esteem, that is, prestige, success.

E. Self-actualization, that is, the desire for self-fulfillment.

Needs were evaluated using this five-point hierarchical scale (Maslow, 1943).

X. Occupation

A. White collar - An individual who: (1) is self-employed and employs at least two workers; (2) received at least half of his income from profits, fees, or commissions; (3) works in an organization that has at least two levels of supervision and is at least at the second level; and/or (4) is engaged in activities that require independent or creative outcomes (Moncrief, 1970).

B. Blue collar - Residual

XI. Residential status

A. Resident - Five or more continuous years of residence in Centre County.

B. Non-resident - Residual.

XII. Selection process - The amount of awareness and rationality used in the selection of alternatives.

There are three types of selection processes.

A. Selective process - level 1 (low) - A familiarity with one type of public forested land or less (awareness) and the selection of alternatives on the basis of chance.

B. Selective process - level 2 (medium) - A familiarity with two types of public land and the selection of alternatives on the basis of high risk methods (pay off) and/or influences such as convenience, friends, and habits.

C. Selective process - level 3 (high) - A familiarity with three or four types of public land and the selection of alternatives on the basis of low risk methods (consequences) and/or influences such as systematic exploration, discussion with professional personnel, quality of wildlife, and habitat, and experience.

Selection process was evaluated using this three point hierarchal scale. If there was inconsistence between awareness and mode of selection, mode of selection was used to determine the selection process level (Bettman, 1971; Green, 1965; Kernan, 1968; Lime, 1971).

XIII. Types of residence

A. Rural - Community with 0-10,000 residents.

B. Urban - Community with more than 10,000 residents.

XIV. Types of recreational activities

A. Remote - Wilderness activities such as hunting, fishing, and hiking that do not require developed facilities (Erickson, 1970; Hendee et al., 1968).

B. Non-remote - Residual.

Table 2. Score consistency distributions - expectations

A. No expectations	Percent consistence with regard to no category scores	Percent in condition
	90 - 100%	100%

B. Low expectations	Percent consistence with regard to low category scores	Percent in condition
	90 - 100%	93%
	80 - 89%	3%
	70 - 79%	2%
	60 - 69%	2%

C. Medium expectations	Percent consistence with regard to medium category scores	Percent in condition
	90 - 100%	60%
	80 - 89%	22%
	70 - 79%	13%
	60 - 69%	5%

D. High expectations	Percent consistence with regard to high category scores	Percent in condition
	90 - 100%	82%
	80 - 89%	8%
	70 - 79%	10%
	60 - 69%	0%

Table 3. Score distribution - expectations

Expectations	N	Percent
None	8	5.7
Low	7	5.0
Medium	79	56.4
High	46	32.9
	140	100.0%

Table 4. Principle component matrix - attitudinal variables: cognitive, affective, and action tendency domains

Attitudinal variables	Factor 1	Commonality
Cognitive	-0.777	0.604
Affective	-0.936	0.876
Action tendency	-0.757	0.574
Percent of trace	100.0	

Table 5. Relationships among attitudinal variables - cognitive, affective, and action tendency domains: factor 1

Cognitive domain	Action tendency domain				Row totals
	Low		High		
	Affective domain		Affective domain		
	Low	High	Low	High	
Low	N = 46 % = 32.9	50 35.7	0 0.0	16 11.4	112(80.0%)
High	N = 0 % = 0.0	22 15.7	0 0.0	6 4.3	28(20.0%)
Column totals	46(32.9%)	72(51.4%)	0(0.0%)	22(15.7%)	140(100.0%

Table 6. Relationship between cognitive domain and an individual's expectations toward public forested land *

Cognitive domain	Expectations			Row totals
	None and Low	Medium	High	
Low	N = 14 % = 93.3	79 100.0	19 41.3	112(80.0%)
High	1 6.7	0 0.0	27 58.7	28(20.0%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 64.465; Relationship significant at .001 probability level; $V^2 = 0.46$

Table 7. Relationship between affective domain and an individual's expectations toward public forested land *

Affective domain	Expectations			Row totals
	None and Low	Medium	High	
Low	N = 10 % = 66.7	26 32.9	10 21.7	46(32.9%)
High	5 33.3	53 67.1	36 78.3	94(67.1%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 10.457; Relationship significant at .01 probability level; $V^2 = 0.08$

Table 8. Relationship between action tendency domain and an individual's expectations toward public forested land.*

Action Tendency Domain	Expectations			Row Totals
	None and Low	Medium	High	
Low	N = 14 % = 93.3	66 83.5	38 82.6	118(84.3%)
High	1 6.7	13 16.5	8 17.4	22(15.7%)
Column Totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

*Chi square = 1.112; Relationship not significant at .05 probably level

Table 9. Varimax rotated matrix - social variables: residential status, sex, marital status, age, and occupation

Social variables	Factor 1	Factor 2	Commonality
Residential status	-0.127	-0.747	0.574
Sex	-0.903	-0.082	0.822
Marital status	0.225	0.631	0.449
Age	0.114	0.678	0.473
Occupation	0.899	0.385	0.956
Percent of trace	72.5	27.5	

Table 10 Distribution of social variable - sex: Factor 1

Sex	Frequency	Percent
Male	79	56.4
Female	61	43.6
Total	140	100.0

Table 11. Relationships among social variables - residential status, age, and marital status. Factor 2

Residential Status	Age				Row totals
	18-34		35+		
	Marital status		Marital status		
	Married	Single	Married	Single	
Resident	N = 5 % = 3.6	5 3.6	36 25.7	5 3.6	51(36.4%)
Non-resident	9 6.4	80 57.1	0 0.0	0 0.0	89(63.6%)
Column totals	14(10%)	85(60.7%)	36(25.7%)	5(3.6%)	140(100%)

Table 12. Relationships among sex, age, and an individual's expectations toward public forested land.

a. Age - 18-34*

Sex	Expectations				Row Totals
	None	Low	Medium	High	
Male	N = 0 % = 0.0	1 20.0	29 53.7	21 61.8	51(51.5%)
Female	6 100.0	4 80.0	25 46.3	13 38.2	48(48.5%)
Column totals	6(6.1%)	5(5.1%)	54(54.5%)	34(34.3%)	99(100.0%)

* The significance of the relationshipswas determined by large-cell Chi square values or marked differences between cell and marginate percentages.

b. Age - 35+ *

Sex	Expectations				Row Totals
	None	Low	Medium	High	
Male	N = 0 % = 0.0	1 50.0	18 72.0	9 75.0	28(68.3%)
Female	2 100.0	1 50.0	7 28.0	3 25.0	13(31.7%)
Column totals	2(4.9%)	2(4.9%)	25(61.0%)	12(29.3%)	41(100.0%)

* The significance of the relationshipswas determined by large-cell Chi square values or marked differences between cell and marginal percentages.

Table 13 Varimax rotated matrix - adolescent experience: size of community, membership in a conservation organization, most important type of recreational activity, occupation of father (or guardian) and mother (or guardian), and educational attainment of father and mother

Adolescent experience	Factor 1	Factor 2	Factor 3	Commonality
Size of community	-0.049	0.038	0.431	0.329
Membership in a Conservation organization	0.206	0.215	-0.248	0.151
Most important type of recreational activity	0.155	-0.007	0.438	0.216
Occupation of father (or guardian)	0.967	-0.136	-0.002	0.954
Occupation of mother (or guardian)	0.102	0.815	0.059	0.678
Educational attainment of father	-0.693	0.256	-0.191	0.583
Educational attainment of mother	-0.350	0.779	-0.047	0.731
Percent of trace	61.0	26.9	12.1	

Table 14. Relationships between adolescent experience variables [illegible] occupation and educational attainment of father: Factor 1

Occupation of father	Education attainment of father		Row totals
	Grades		
	1-12	13+	
White collar	N = N = 2 % = 1.4	36 25.7	38(27.1%)
Blue collar	84 60.0	18 12.9	102(72.9%)
Column totals	86(61.4%)	54(38.6%)	140(100.0%)

Table 15. Distribution of adolescent experience variable - occupation of mother: Factor 2

Occupation of mother	Frequency	Percent
Employed	26	18.6
Housewife	114	81.4
Total	140	100.0

Table 16. Relationships between adolescent experience variables - size of community and most important recreational activity: Factor 3

Size of community	Most important type of recreational activity		Row totals
	Remote	Non-remote	
Rural 0-10,000	N = 43 % = 30.8	24 17.1	67(47.9%)
Urban 10,001 +	3 2.1	70 50.0	73(52.1%)
Column totals	46(32.9%)	94(67.1%)	140(100.0%)

Table 17. Relationship between occupation of father and an individual's expectations*

Occupation father	Expectations			Row totals
	None and Low	Medium	HIgh	
White Collar	N = 2 % = 13.3	15 19.0	21 45.7	38(27.1%)
Blue Collar	13 86.7	64 81.0	25 54.3	102(72.9%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100%)

* Chi square = 12.043; Relationship significant at .01

Table 18. Relationship between occupation of mother and an individual's expectations*

Occupation of mother	Expectations None and Low	 Medium	 High	Row totals
Employed	N = 2 % = 13.3	15 19.0	9 19.6	26(10.6%)
Housewife	13 86.7	64 81.0	37 80.4	114(81.4%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 0.329; Relationship not significant at .05 probability level.

Table 19. Relationship between type of recreational activity and an individual's expectations.*

Type Recreational Activity	Expectations None and Low	 Medium	 High	Row totals
Remote	N = 0 % = 0.0	21 26.6	25 54.3	46(32.9%)
Non-remote	15 100.0	58 73.4	21 45.7	94(67.1%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 18.374; Relationship significant at .001 probability level; $V^2 = 0.13$.

Table 20. Varimax rotated matrix - functional perspective variables: meaning, needs, selection process, and habit

Functional Perspective variables	Factor 1	Factor 2	Factor 3	Commonality
Concrete meaning	-0.073	0.769	0.114	0.610
Use meaning	0.074	0.987	0.019	0.981
Emotional meaning	0.772	-0.164	0.193	0.660
Symbolic meaning	0.978	0.081	-0.056	0.965
Needs	0.204	0.014	0.718	0.557
Selection process	0.044	0.123	0.864	0.763
Habit	0.401	0.550	0.248	0.226
Percent of trace	42.4	34.6	23.0	

Table 21. Relationship between functional perspective variables - emotional and symbolic meanings: Factor 1

Emotional meaning	Symbolic meaning			Row totals
	Negative	Neutral	Positive	
Negative	N = 5 % = 3.6	0 0.0	0 0.0	5(3.6%)
Neutral	1 0.7	58 41.4	0 0.0	59(42.1%)
Positive	7 5.0	2 1.4	68 47.9	76(54.3%)
Column totals	13(9.3%)	60(42.8%)	67(47.9%)	140(100.0%

Table 22. Relationship between functional perspective variables - concrete and use meanings: Factor 2

Concrete meaning	Use meaning			Row totals
	Negative	Neutral	Positive	
Negative	N = 13 % = 9.3	0 0.0	3 2.1	16(11.4%)
Neutral	1 0.7	52 37.1	0 0.0	53(37.9%)
Positive	5 3.6	0 0.0	66 47.1	71(50.7%)
Column totals	19(13.6%)	52(37.1%)	69(49.3%)	140(100.0%)

Table 23. Relationships between functional perspective variables - needs and selection process: Factor 3

Needs	Selection process			Row totals
	Chance	Payoff	Consequence	
None	8 5.7	0 0.0	0 0.0	8(5.7%)
Physiological	0 0.0	0 0.0	0 0.0	0(0.0%)
Safety	3 2.1	15 10.7	2 1.4	20(14.3%)
Identification	14 0.7	48 15.0	0 0.0	62(44.3%)
Esteem	1 0.7	21 15.0	0. 0.0	22(15.7%)
Self-actualization	1 0.7	5 3.6	22 15.7	28(20.0%)
Column totals	27(19.3%)	89(63.6%)	24(17.1%)	140(100.0%)

Table 24. Relationship between concrete meaning and an individual's position on public forested land*

concrete meaning	Expectations None and Low	 Medium	 High	Row totals
negative and neutral	N = 13 % = 93.3	42 53.2	14 30.4	69 (49.3%)
positive	2 6.7	37 46.8	32 69.6	71 (51.7%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 18.626; Relationship significant at .001 probability level; $V^2 = 0.13$.

Table 25. Relationship between emotional meaning and an individual's position toward public forested land*

Emotional meaning	Expectations None and Low	 Medium	 High	Row totals
negative and neutral	N = 13 % = 86.7	38 48.1	13 28.3	64(45.7%)
positive	2 12.3	41 51.9	33 71.7	76(54.3%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 18.491; Relationship significant at .001 probability level; $V^2 = 0.13$

Table 26. Relationship between selection process and an individual's position toward public forested land *

Selective Process	Expectations			Row totals
	None and Low	Medium	High	
Chance (level 1)	N = 9 % = 60.0	17 24.0	1 2.0	27(19.0%)
Payoff (level 2)	4 27.0	62 76.0	23 50.0	89(64.0%)
Consequence (level 3)	2 13.0	0 0.0	22 48.0	24(17.0%)
Column totals	15(10.7%)	79(56.4%)	46(32.9%)	140(100.0%)

* Chi square = 66.134; Relationship significant at .001 probability level; $V^2 = 0.46$

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CHANGES IN THE ATTITUDES TOWARD RACE RELATIONS OF SOUTHERN RURAL BLACKS: ANALYSIS OF A PANEL OF VILLAGE WOMEN, 1970-1972*

by

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Introduction

This is the third in a series of reports[1] aimed at monitoring changes or stability in attitudes toward race relations of a panel of black, female adults. The black respondents resided in an economically depressed area of rural East Texas, an area culturally akin to the "Deep South." They were interviewed every year for the last three years (1970 through 1972), regarding several dimensions of racial attitudes: (1) their perception of the racial prejudice that was directed at them by local whites; (2) their desires for racial integration; (3) their perception of the possibility for racial integration in their local area.

As mentioned in our previous reports, we think our study has value, because it focuses on the much neglected rural, rather than metropolitan, black and because it appears to be among the first systematic attempts to tap dynamics in blacks' racial attitudes. Our longitudinal study is very timely, as the first contact of respondents immediately preceded and the last two immediately followed integration of public schools in the study area.

Past Research

Although change in the attitudes of blacks has been analyzed (see the postscript to Gary Marx's 1964 survey, Marx, 1969), it has been from different one-point-in-time studies which incorporated different questions and different sample composition. Moreover, because most studies have dealt with metropolitan blacks, there is little basis for even this kind of expost facto analysis in reference to blacks in the rural South. However, it is significant that among the metropolitan blacks, at least, a general constancy in several dimensions of blacks' racial attitudes seems to have occurred over a period of our history characterized by change in race relations--1964 to 1968. The surveys during this period show unrelenting attitudes among the black majority of nonmilitancy, optimism about the future of race relations, support for integration, rejection of separatism, and a high degree of racial tolerance among blacks as shown in social-distance patterns and attitudes toward whites. (See a synthesis of these surveys in Marx, 1969.)

Even though Marx's study suggests this moderate stance characterizes most metropolitan blacks, regardless of region, age, sex and social class, antiwhite attitudes have been found to be more extreme among black

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[1] See Kuvlesky and Dietrich (1972) and Kuvlesky and Cannon (1971).

Southerners (Marx, 1969:187; Williams, 1964:274), females (Williams, 1964:267), the economically depressed and poorer educated (Marx, 1969: 188). Differences by rural, small-town, and metropolitan residence have also been observed in our own data (Kuvlesky, Warren, and Ragland, 1972), with the rural blacks showing substantially lower desires than the others for racial integration.

It is also important to bear in mind differences in the various dimensions of racial attitude, for they are not necessarily highly correlated. For example, the groups noted above as most likely to hold antiwhite attitudes appear the least likely to be militant (Marx, 1969). In addition, antiwhite prejudice itself has several dimensions. Desire for integration is a manifestation of what Williams (1964:28) terms affective prejudice (attraction or aversion), and it seems to vary greatly by social context, decreasing the higher the degree of informality that would be involved in black-white interaction (Kuvlesky, Warren, Ragland, 1972).

On the other hand, the blacks' perception of negative prejudice directed toward them by whites might be indicative--if prejudice breeds counter-prejudice as Williams (1964) proposes--of cognitive prejudice (stereotyping) toward whites by blacks, themselves. Supporting this hypothesis is the finding by Brooks and Hawley (1972) that whites and blacks seem to perceive the others' racial prejudice, stereotyping, and ethnocentrism to be greater than it actually is.

An additional type of prejudice, evaluative, refers to normative standards regarding race relations--for example, "attitudes toward questions of public policy concerning racial minorities" (Williams, 1964:29). Our measure, perception of the possibility for racial integration, would seem to be associated with this measure--a reflection of what the blacks think possibilities for integration should be.[2]

The Study Area

Two all-black villages in a predominantly rural[3] county of East Texas were selected for the study area. The county was adjacent to the Louisiana border and about 60 miles from the nearest metropolitan center. About one-fourth of the county's inhabitants were black. Socioeconomic discrepancies between the blacks and whites of the county were substantial.

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[2] See Kuvlesky and Cannon (1971) and Kuvlesky, Warren, and Ragland (1972) for a discussion of the relationship of our racial orientation variables to these types of prejudice.

[3] The 1970 census shows 75 percent of the county's population living in places of 2500 or less inhabitants.

The villages appeared rather typical of many black, rural settlements in East Texas. Each had a population of about 100, and the homes were sparsely distributed on a network of dirt roads. Both were relatively isolated from white traffic. Most of the houses in the communities were very small, dilapidated frame structures, suggesting a conspicuously lower level of living than that generally found among whites in the county.

Procedures of Data Collection

The black female respondents were first contacted in the early summer of 1970, immediately following the closing of school for the summer. The initial data were collected as part of a larger study designed to comprehensively investigate patterns of living in disadvantaged families. In accordance with the guidelines set forth in the larger study, only the main female homemakers of families in the study area who met the following criteria were included in the sample: (1) at least one child under 18 years of age resided in the home; (2) the female homemaker normally resided in the home; (3) the female homemaker mainly responsible for caring for the home was under 65 years of age and, unless she was the mother of one or more of the children living in home, under 18. About half of the black families in the study area met these criteria, and of those qualifying, all but one (less than 1%) was interviewed. The original sample numbered 52 black females.

In the early summer of 1971 and 1972, an attempt was made to reinterview all of these rural black homemakers about their attitudes toward race relations. Only black female interviewers were used in all three contacts. All but four of the respondents were interviewed again in 1971; another four could not be reinterviewed in 1972. There were no refusals. The reasons for the loss of the eight respondents were because they had moved from the local area, death, or illness. These eight have been excluded from this analysis. The exclusion was not found to change the 1970 and 1971 aggregate distribution of responses appreciably.

In 1970, the mean and median incomes of the families in the rural sample were about $1,000 higher than those of all blacks in the county. (A factor probably largely due to the exclusion of the elderly from our sample.) However, according to a poverty index by which income is evaluated in relation to family size, age of family members, and a consumer price index for the area of study, almost three-fourths of the respondents' families were judged to be disadvantaged or marginal. About a third of the families were female-headed (no husband). In the two-parent families, almost all of the husbands and about half of the homemakers were employed. Both usually worked as semiskilled or unskilled laborers in the white-owned and managed poultry and lumber industries of the area.

In the 1970 survey, most of the homemakers were between 30 and 49 years of age, and most had not completed high school. Almost all were born locally (i.e., within 50 miles of their present home) and had lived over half of their lives in rural areas. Few had moved their place of residence in the past five years.

In addition to the rural, Southern nature of the black sample, the sex and ages of the respondents are probably important attributes influencing their attitudes toward race relations. Black females have been found to be more prejudiced (Williams, 1964:269) yet less militant (Marx, 1969:54) than black males. Both antiwhite attitudes and militancy has been shown to be greater among the young and middle-aged blacks than among the elderly (Marx, 1969:54). If findings of the Cornell reports (1948 through 1956; see Williams, 1964) are still viable, these black females from the rural South may be among the most prejudiced blacks in the nation.

Perception of Prejudice

To elicit the black respondents' perception of whether anti-black prejudice was directed at them by local whites, they were asked to what extent they agreed or disagreed with the following statements:

(1) "White people around here judge Negroes by the worst type of Negroes";
(2) "White people around here don't like to be around Negroes":
(3) "White people around here don't like white kids to play with Negro kids";
(4) "White people around here never let you forget they are white and you are Negro";
(5) "White people around here think they are cleaner than Negroes."

Alternative responses were: "strongly agree"; "tend to agree"; "tend to disagree"; "strongly disagree." These responses were weighted 4 through 1, respectively, and the weighted responses for all the items were summed to produce a scale of "perceived prejudice." The scalability of the items was examined previously by Kuvlesky, Warren, and Ragland (1972) and found to be acceptable. A high reliability coefficient ($\alpha = .91$[4]) was reported for the 1970 sample.

As shown in Table 1, the blacks perception of prejudice directed at them by local whites appears to have decreased each year, culminating in substantially lower scores in 1972 as compared to 1970. Whereas in 1970 three-fourths of the blacks' scores were concentrated in the upper-half of the scale (indicating that they answered most of the perceived prejudice items positively), by 1972 the majority of scores fell in the

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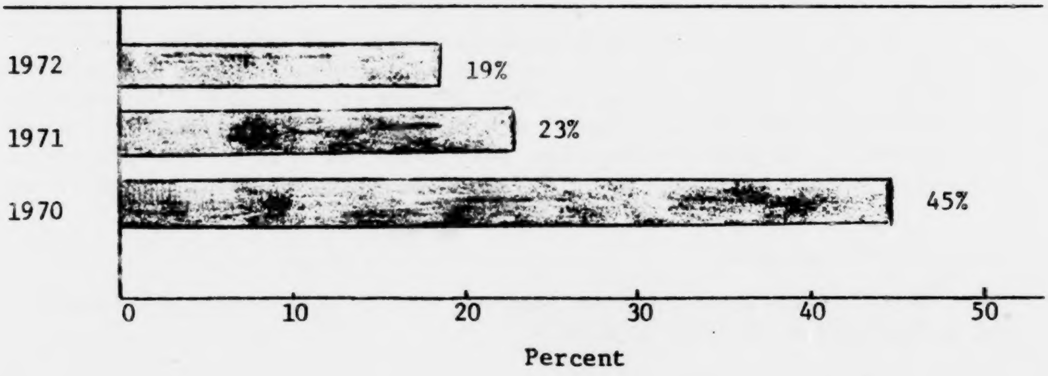
[4] See Kuvlesky, Warren, and Ragland (1972) and Bohrnstedt (1969) for a discussion of this statistic.

Table 1. Percentage Distribution of "Perceived Prejudice" Total Scores by Year of Contact.

		PP Score	Spring, 1970 (N=44)	Spring, 1971 (N=44)	Spring, 1972 (N=44)
			Percent		
Generally did not perceive prejudice	Low	5 (-)	2	0	2
		6	2	0	0
		7	(8) 0	(2) 0	(11) 0
		8	4	2	9
	Mod. Low	9	2	7	14
		10	7	5	7
		11	(18) 0	(28) 2	(44) 9
		12	9	14	14
Generally perceived prejudice	Mod. High	13	2	11	5
		14	2	5	7
		15	(29) 16	(47) 20	(26) 7
		16	9	11	7
	High	17	23	9	9
		18	2	2	4
		19	(45) 6	(23) 7	(19) 4
		20 (+)	14	5	2
		TOTAL	100	100	100
		MEAN	14.91	14.30	12.73

Figure 1. Respondents Showing a High Perception of Prejudice Directed at Them.



lower half of the scale (answers to most of the questions were negative).

Figure 1 illustrates the dramatic decrease which occurred at the "high" end of the scale, a decrease of about half between 1970 and 1972. Almost all of this decrease took place between the first and second contacts, however. The last year of the study (from the spring of 1971 to the spring of 1972) primarily witnessed aggregate movement from the high to the lower end of the moderate range.

Longitudinal change for each of the scale items was also examined to determine if any particular item(s) may have accounted for most of the decrease in total scale scores. The substantial decrease in affirmative response was found to have occurred for each of the items.

Desires for Racial Integration or Segregation

As mentioned previously, the degree of formality or informality of social relations has been found to influence attitudes regarding interracial interaction (Williams, 1964:283, 297-298). Consequently, the questions regarding desires for integration or segregation focused on a variety of social contexts, covering a range of degree of formality-informality. Specifically, the blacks were asked about their preference for interaction with "Negroes only" or "Negroes and whites" in reference to: (1) going to church; (2) their children attending school; (3) their children's playmates outside of school; (4) close, personal friendships; (5) ownership of the stores they patronized. Responses to each of the items were weighted (Negroes only = 1; Negroes and whites = 2) and summed. Kuvlesky and Warren report a reliability coefficient (α) of .85 for the 1970 responses to this scale.

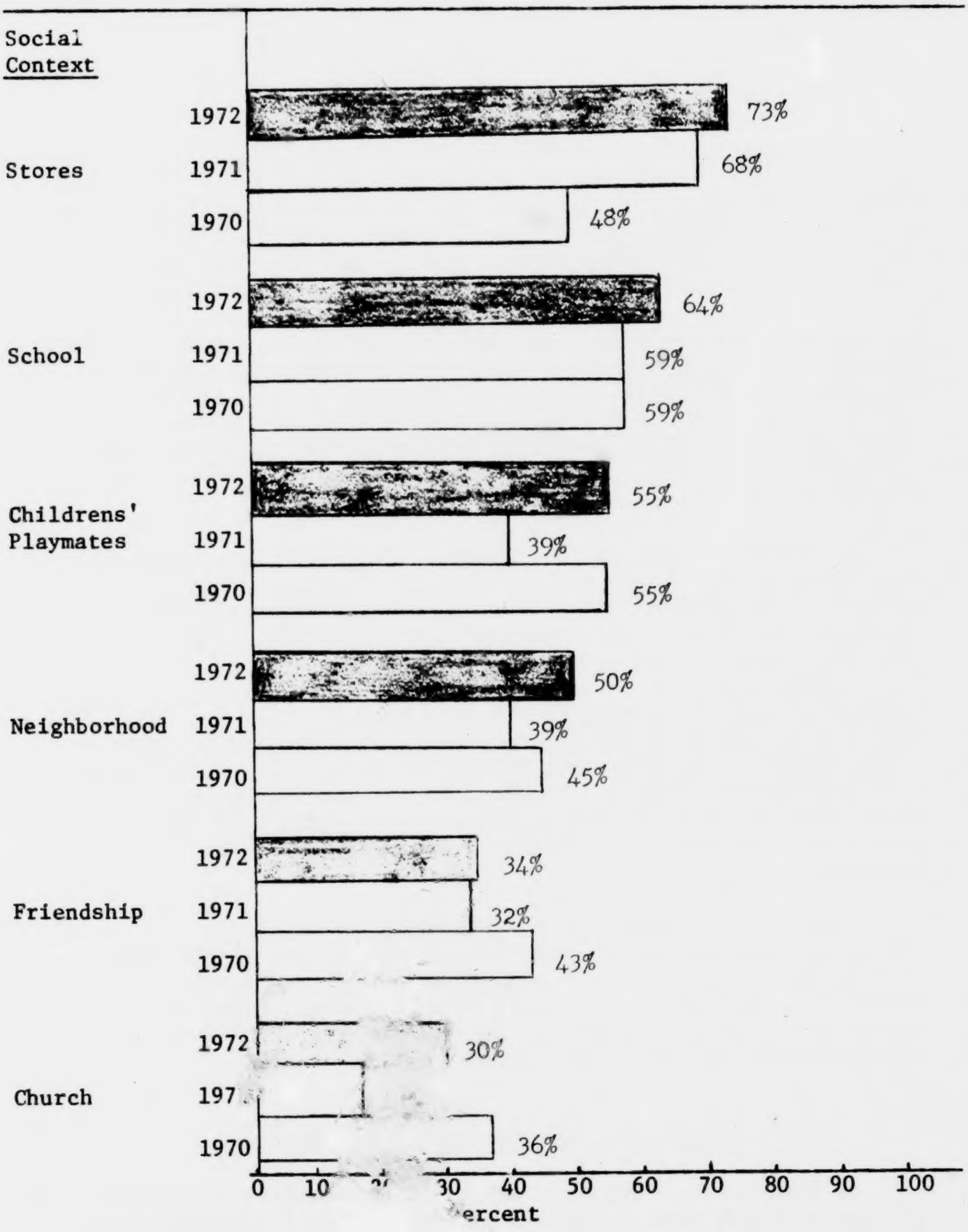
Change in the blacks' desires for integration did not occur in a consistent direction, as did change in perception of prejudice. Table 2 shows the respondents somewhat polarized in their desires in 1970; 1971 witnessed a movement toward the middle but with a general proclivity for segregation; and 1971 witnessed an increase in desire for integration. Although by 1972 the polarization of responses was not as extreme as in 1970, there was still a considerable lack of consensus among the respondents. The net change between 1970 and 1972 was only a slight, and probably insignificant, increase in desire for integration.

Figure 2 provides a comparison of change in preference for racial integration by each of the social contexts that were specified. The only cumulative increase over the three contacts in desired integration was in reference to buying from white as well as black merchants. Comparing only the 1970 and 1972 differences by social contact, the only marked increase was also in reference to merchants. The ordering of desire for integration by social context changed only between the first

Table 2. Percentage Distribution of "Desire for Integration" Total Scores by Year of Contact.

	DI Score	Spring, 1970 (N=44)	Spring, 1971 (N=44)	Spring, 1972 (N=44)
		Percent		
Desired	6 (-)	30	21	18
Segregation	7	(48) 9	(55) 11	(45) 9
In Most	8	9	23	18
	9	9	18	16
Desired	10	9	7	9
Integration	11	(43) 9	(27) 9	(39) 3
In Most	12 (+)	25	11	27
	TOTAL	100	100	100
	MEAN	8.86	8.52	9.05

Figure 2. Respondents Preferring Racial Integration



two contacts, where merchants replaced schools as the most preferred context for racial integration. Throughout the longitudinal study, church remained the least desired context.

Perception of the Possibility for Racial Integration

To elicit the black respondents perception of the possibility for racial integration in their local area, they were asked to indicate whether they thought it was "possible" or "not possible" now where they lived for Negroes and whites to interact in five of the six social contexts delineated above. The context of store ownership was excluded from this instrument, because the researchers knew that the blacks of these communities frequently shopped at white owned stores. Responses to the question regarding schools has been deleted from the perceived integration scale, because the schools were scheduled to be integrated when opened in the fall, and the respondents unanimously reported that it was possible for their children to attend school with white children. Responses to the remaining four items were weighted (possible = 2; not possible = 1) and summed to produce the perceived possibility of integration scale.

As shown in Table 3, there appears to have been a progressive but slight decrease over the two years in the black respondents' perception of the possibility for racial integration where they lived. Although the trend is of questionable significance, it is interesting that the number of respondents taking the most extreme negative position--i.e., claiming no possibility for integration in any of the social contexts mentioned--increased from 0 to 2 by 1972. Perhaps these decreases forecast an awakening to reality taking place among some respondents as blacks begin to actually test a range of opportunities for integration. Most significant, however, is the fact that the scale scores for all three contacts were positively skewed, indicating that integration generally continued to be perceived as possible in most of the social contexts.

Examined in Figure 3 is change in the perception of the possibility for racial integration in reference to each of the social contexts. Except in reference to church, change was slight and the net 1970-1972 difference, negligible. A significant decrease appeared in the perceived possibility of going to church with whites; however this occurred between the first two contacts.

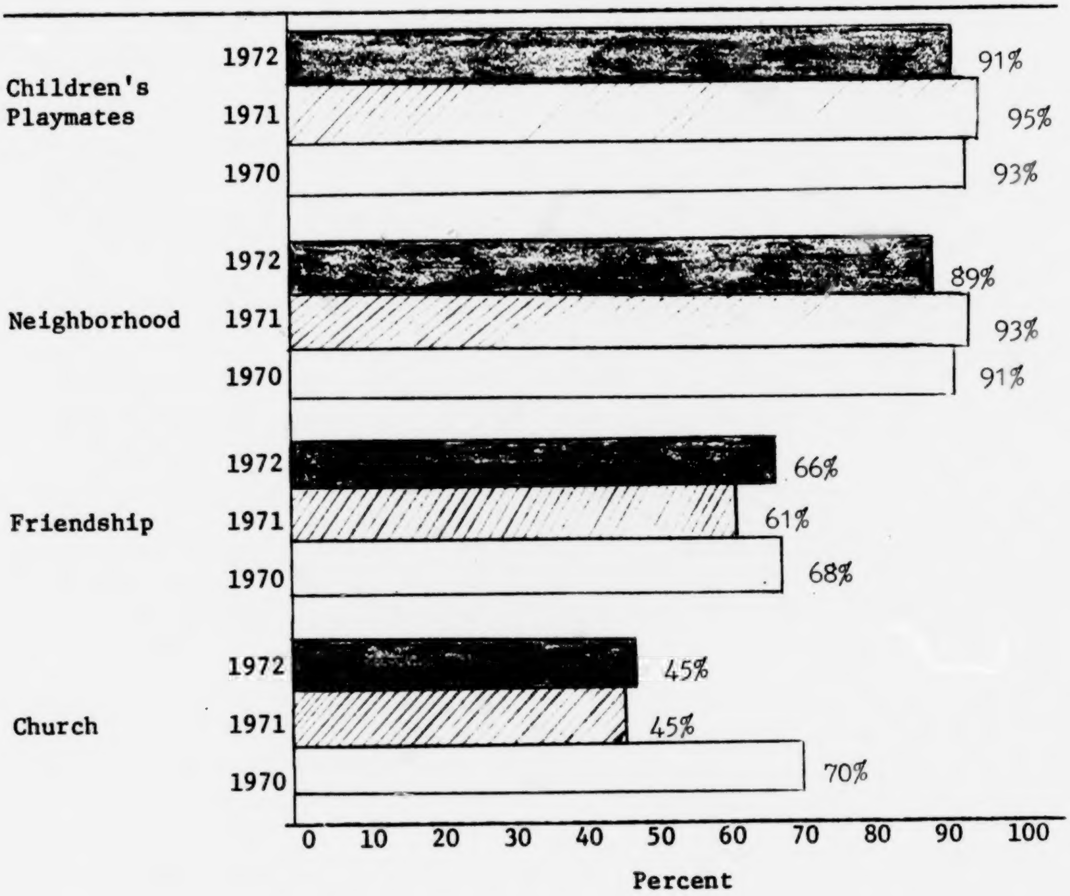
Desire vs. Opportunity for Integration

An interesting finding of our previous analyses is that the proportion of black respondents who perceived racial integration as possible exceeded the proportion desiring it in reference to every social context that was specified. It seems especially significant that

Table 3. Percentage Distribution of "Perceived Possibility for Integration" Total Scores by Year of Contact.

	PPI Score	Spring, 1970 (N=44)	Spring, 1971 (N=44)	Spring, 1972 (N=44)
		Percent		
Low Possibility	4	0	0	4
	5	(7) 7	(5) 5	(9) 5
Moderate	6	13	27	25
High Possibility	7	23	32	25
	8	(80) 57	(68) 36	(66) 41
	TOTAL	100	100	100
	Mean	7.30	7.00	6.93

Figure 3. Respondents Perceiving Racial Integration as Possible



these discrepancies continued to occur at every time of contact and were always substantial (Table 4).

The discrepancy between desired and perceived possibility for integration appears to have been greater in 1971 than in either 1970 or 1972. Only responses in reference to school and church showed even moderate net change (a decrease) between 1970 and 1972.

Referring back to Figures 2 and 3, desire for racial integration appears the more dynamic of the two variables. Thus, it is change in this variable which primarily accounts for the change in the discrepancies between desired and perceived possibility for integration.

Summary of Findings

Of the three orientations toward race relations, the only one which showed significant change over the two-year period of study was the blacks' perception of prejudice directed at them by local whites (Tables 5 and 6). The change was progressive, culminating in a markedly lower perception of prejudice by 1972.

In contrast, the other racial orientations seemed extremely stable over the longer range, at least. Except for a short period of fluctuation which seemed to occur in the blacks' initial adjustment to concomitants of school integration (although not the situation of school integration, itself), little change of consequence was noted in the blacks' desires for integration. The respondents maintained a lack of consensus in their desires, but were generally less inclined toward interaction with whites the less formal the context of social interaction. The blacks continued to be generally optimistic in their evaluations of the possibility for racial integration. In regard to the relationships between the two variables, perceived opportunity for integration remained much greater than the desire for it, regardless of social context.

Obviously, it can be concluded that perception of racial prejudice, because it is decreasing rapidly while all else remains stable, operates independently from the other orientations toward interracial interaction.

Discussion

Obviously, our ability to generalize from these findings with any degree of certainty is severely restricted by our small, relatively homogeneous panel and by the lack of other directly relevant findings on the dynamics of Southern blacks' attitudes toward race relations. There is a compelling need for more longitudinal research of this kind on a variety of black population types.

Table 4. Aggregate Differences in the Perceived Possibility for Integration and Desire for Integration, by Social Context and Year of Contact

Social Context	1970		1971		1972	
	Proportionate Difference	Direction of Difference	Proportionate Difference	Direction of Difference	Proportionate Difference	Direction of Difference
Neighborhood	46	PI>DI	54	PI>DI	39	PI>DI
Children	38	PI>DI	56	PI>DI	36	PI>DI
Friendship	25	PI>DI	29	PI>DI	32	PI>DI
School	41	PI>DI	41	PI>DI	29	PI>DI
Church	34	PI>DI	29	PI>DI	15	PI>DI

Table 5. Summary of Mean Race Relations Orientation Scale Scores Over 2 Year Period, 1970-1972.

	PP	DI	PPI
	Mean Scores		
1970	14.9	8.8	7.3
1971	14.3	8.6	7.0
1972	12.7	9.1	6.9
70-72 Difference	-2.2	+.3	-.4
Possible Score Range:	5-20	6-12*	4-8*

*The higher the score the more racial integration is desired and the more integration is perceived as possible.

Table 6. Summary of Change in Negative Orientations of Race Relations Over 2 Year Period: 1970-1972.

Contacts	Generally Perceived Prejudice 1/	Generally Desired Racial Segregation 2/	Generally Saw Integration as Not Possible 3/
	Percent of Respondents		
1970	74	48	7
1971	70	55	5
1972	45	45	9
70-72 Difference	-29	- 3	+2

1/ PP Scores of 13-20 (see Table 1)

2/ DI Scores of 10-12 (see Table 2)

3/ PPI Scores of 7-8 (see Table 3)

One might speculate from our findings that a change in at least cognitive prejudice is taking place in the rural South. Perhaps the Southern rural blacks are moving toward the moderate stance which Marx and others (Marx, 1969) have observed in the metropolitan North. Unfortunately, differences in measures and in the attitudinal dimensions that are being investigated preclude direct comparison of our findings with these previous reports. Only through additional, systematic and broader-based research can the validity of the foregoing propositions be ascertained.

The change observed in perception of prejudice is intriguing because "attitudes that may be a deep-lying part of an individual's personality, such as orientations to out-group. . . under normal conditions are not likely to change markedly from year to year" (Marx, 1969:229). While school integration and other changes which may have accompanied it might have been a potent enough force to provoke alteration in this attitude, it is confounding that concomitant change did not occur in the other two orientations toward race relations. What factor(s) could have produced changes in perception of prejudice and yet not influence changes in desire and perception of possibility for integration?

The differential behavior of these variables over time further emphasizes the importance of distinguishing between various types of prejudice, if the three orientations we studied do in fact reflect these different types. As noted previously, perception of prejudice may reflect cognitive prejudice; desire for integration, affective prejudice; and perception of the possibility for integration, normative prejudice. Past research has not always clearly distinguished among these types and has tended to presume that they were highly intercorrelated. Our findings suggest that:

(1) cognitive prejudice varies independently of other types of prejudice;

(2) cognitive prejudice directed toward whites by blacks may be decreasing rapidly, while other types of prejudice remain stable.

In reference to the latter, it should be pointed out that in our initial survey (1970) cognitive prejudice was more extreme than the other two types.

Furthermore, if cognitive prejudice among blacks and whites is reciprocal, as Williams postulates, the decrease of perceived prejudice among these blacks may be reflecting a sharp decline in cognitive prejudice among the local white people. On the other hand, the failure for perception of opportunity for integration to increase over the two year period--especially given the fact that school integration in the area was accomplished by court order during the period of study--would reflect that such legal forces do not have a quick impact on the normative separatist structures that are traditional in this region. As a consequence, actual assimilation and diffuse, broad integration of racial populations does not appear to be taking place in these and similar communities throughout the "Deep South."

We believe that these assertions, speculations, and suggestions offer fertile ground for stimulating and socially relevant research. While race relations is a topic of high social relevance and public priority in our society today, we see no immediate improvement in the lack of research attention being given to it by sociologists and rural sociologists, in particular. A. Lee Coleman (1965) pointed to this need for research a long time ago, and we have continued to echo him strongly since the fall of 1971. Not only has little additional research by rural sociologists appeared, few have even bothered to challenge or react to our findings and the risky generalizations and implications we have inferred from them. Why? We don't know the answer for sure but have developed a set of speculations in a paper given to the Texas Academy of Science last year (Kuvlesky and Taft, 1972).*

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*This paper will be sent upon request.

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New Problems, Old Resources:

Continuity in Southern Culture

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Sociologists who have studied the American South have, by and large, been inclined to attribute cultural differences between white Southerners and other Americans to regional differences in occupational structure and economic circumstance.[1] With the economic development and "national incorporation" of the South proceeding apace, advocates of this view seem to be taking it for granted that regional cultural differences are also diminishing--as, of course, many of the most dramatic and visible differences have been.[2] But there is an accumulating body of literature which demonstrates that many, more subtle, regional cultural differences not only remain, but show no signs of going away.[3] This suggests that the orthodox materialist view is (at least) inadequate, and that we must look elsewhere for the explanation of some white Southern peculiarities.

White Southerners are not the only group in America which has surprised our discipline by maintaining its identity and distinctiveness. During the last decade, especially, we have had it called to our attention that many immigrant ethnic groups are still around, and still serve their members both as social contexts and as psychological entities around which sentiments are organized.[4] Add to these observations the fact that many black Americans are beginning to feel that the group identity and cohesiveness forced upon them in the past may actually serve, with modifications, as a valuable resource in the future, and it is not surprising that American sociology has begun to take seriously again the concept of "ethnicity."[5]

With these developments in our discipline, it was perhaps inevitable that some of us would begin to listen to the argument of some historians and journalists: that white Southerners could be regarded fruitfully as an ethnic group, a group serving the same functions for its members and related to the American majority group in much the same way as groups more conventionally called "ethnic": Irish-, Polish-, or Lithuanian-Americans, for instance. Lewis Killian has picked up the argument in his volume, White Southerners, (published in a series called "Ethnic Groups in Comparative Perspective") and I have done the same in a monograph published recently.[6] Analogies are a dime a dozen, of course, but there is already considerable evidence that this is a valuable one. Killian has used it most persuasively to discuss the situation of white Southern migrants to large Northern cities, and it helps to make sense of the large and persistent cultural differences between white Southerners and other Americans--not so much by explaining them as by placing them in a more general category of puzzling phenomena.[7] As seems to be the case for many of these immigrant groups, white Southerners are still, in many respects, different from the "American mainstream" (whatever that may be), they are as different now as they have been at any time in the recent past, and these cultural differences cannot be explained by regional differences in occupational structure and economic circumstance. To paraphrase Irving Babbitt's classic observation about the Spanish, "There is something Southern about Southerners which causes them to behave in a Southern manner." The educated, urban, factory-working Southerner remains. . . a Southerner, and that datum often tells us as much about him, his tastes, values, and habits, as any of the others.

These findings are of some theoretical importance. They suggest that the secondary or "technological" order and the primary or "humanistic" order (as the editors of a forthcoming symposium have called them) can be more disjoint than many have supposed.[8] The citizen of the New South may spend forty hours a week at a job indistinguishable from those held by other Americans, but, it appears, he will spend nearly twice as many waking hours in a family and community organized around sentiments and presuppositions somewhat different from those held elsewhere.[9] Students of the South who are concerned about their subject matter's evaporating can turn with profit to the study of these persisting sentiments and presuppositions.

The disjunction between work and "life" (to put the matter baldly, and perhaps badly) is not absolute, of course--merely greater than some demographers and economists have implied. Certainly industrialization will affect Southern culture (it already has, in many obvious ways). No less important are the effects of Southern culture on the course and outcome of industrialization.[10]

To one who feels that we really do not know what "Southern culture" is, much less what it is likely to be (and those who share my prejudice in favor of replicable, comparative, and preferably quantitative documentation must feel this way), it seems premature to discuss the relation between that culture and industrialization. None the less, of the aspects of Southern culture which can be demonstrated to exist and to be persisting, two in particular strike me as pertinent to this relation: the peculiar nature and extent of religious belief and practice in the South, and the relatively great attachment Southerners show to their local communities. I have examined each extensively in my own work, but since these analyses have been reported elsewhere, I propose merely to summarize some of the findings and then to consider what the persistence of these traits implies for the future of the South.[11]

Religion in Southern Culture

In this century, one of the most remarkable differences between the South and the rest of the United States, has been the endemic and pervasive religiosity of the former. Nearly every student of the South has commented on this feature of Southern life, and many have argued its central importance to an understanding of that life.[12]

Some of the findings from the public opinion poll data are:

> Nearly ninety percent of all white Southerners identify themselves as Protestant, and nearly four

> out of every five of these are Baptist, Methodist, or Presbyterian.
>
> Regardless of denomination, apparently, Southern Protestants are more orthodox in their beliefs than are non-Southern Protestants. Despite this, there are a number of indications that they take denominational distinctions more seriously.
>
> Southern Protestants are nearly twice as likely as non-Southern Protestants to assert that church-going is an essential part of the Christian life, and they are in fact more likely to be found in church on any given Sunday.
>
> Southern Protestants are less likely than Protestants elsewhere to feel that religion is irrelevant to the modern world, and they are more likely to feel that no changes are needed in their churches.

The picture of the South which emerges from these data is of a society which takes religion seriously. A high degree of consensus on fundamentals permits heated disagreement on relatively minor points of faith and practice. Southerners are basically satisfied with their churches, and support them accordingly: religious institutions play an important role in the social and spiritual life of the South.

Some recent work has shown that regional differences on these basic questions of belief and of support for the institutional church have not become smaller in the recent past, and they are not likely to do so in the near future. In particular, when trend data are available, they often show change in these respects, in the South and elsewhere, but the differences between South and non-South are no smaller now than a generation ago, despite the massive changes in Southerners' material circumstances in that period. When statistical controls for education, occupation, and urban-rural residence are introduced (to ensure that the observed regional differences are not due to differences in these factors), nearly all of these differences remain, and a few become even more pronounced. Some regional differences in what may be called "para-religious" beliefs and practices--anti-Semitism, anti-Catholicism, support for national prohibition, and the like--may be decreasing (although much remains), but the data strongly suggest that the religion of the New South will be as vigorous and as distinctive as that of the old.

Detailed analysis of patterns of religiosity within the South and non-South helps show why this should be so. The Gallup Poll has frequently asked its respondents whether they had been to church in the previous week. By pooling the responses to several of these surveys we can look at the churchgoing behavior of relatively small subpopulations within the Southern and non-Southern populations. Considered in the aggregate, Southern Protestants are more likely to report that they have been to church lately than are their non-Southern coreligionists.

Table 1 shows, however, that this difference is smallest--slightly reversed, in fact--for a group which is shrinking rapidly in the South, the uneducated farm population. Many of these people are moving into blue-collar occupations in Southern cities, a move which does not seem to carry with it a diminution of churchgoing. Outside the South, urban blue-collar workers are among the people least likely to be reached by the churches; in the South, they are as likely to be churchgoers as are their country cousins. Among the rural groups and possibly among the urban as well, increasing education not only increases churchgoing (both in the South and elsewhere), but also the regional difference in churchgoing.

Another interesting difference between South and non-South is evident at the top of the urban occupational ladder. In non-Southern cities, as Table 2 shows, business and professional people are less likely to be churchgoers than are their white-collar employees. In Southern cities, however, that pattern is reversed: the "leadership classes" in Southern cities are one of the most churchgoing groups in the region. Indeed (for Protestants outside of Calvin's Geneva) their churchgoing is extraordinary by any standard.

The prophet Amos foretold a day when many should "wander from sea to sea, and from the north even to the east," seeking the word of the Lord, in vain. In these latter days, the way-faring stranger would be well-advised to forsake the secular North, abjure the mysterious East, and check out the South. He will find gas station signs like the one in my town, advertising on one side "REGULAR 29^9" and on the other "WHEN YOU HAVE SINNED/READ PSALM 51." In the South, one can still both save and be saved.

"Particularism" in Southern Culture

Drawing on her extensive field experience, Marion Pearsall has asserted that "in Southern Appalachia and the rest of the South, it is the concreteness of life that is valued, the particular locations and the particular possessions."[13] And, it might be added, the particular persons, for there appears to be a general cultural tendency here, toward what sociologists call particularism, a disinclination to see persons, places, or things as interchangeable.[14] A particularistic orientation causes persons to be seen as complex beings, existing in their own right, not merely as performers of specialized roles in interaction with the observer. Material objects are imbued with associations which are not transferable to functionally equivalent objects. And, importantly, places are also regarded holistically and affectively: when applied to places, particularism is evident as what Robert Merton has called localism.[15]

Many observers have remarked that Southerners show a peculiar attachment to their homeplaces, and the survey data support these observations.[16] A few scattered indicators:

Table 1

Churchgoing of Southern and Non-Southern Urban Blue-Collar and Rural Farm Populations (Protestants Only)

% who went to church the previous Sunday

	South	Non-South	Difference (South)-(Non-South)
Rural farm, high school graduates	60%	49%	11
(N)	(148)	(386)	
Rural farm, not high school graduates	43%	46%	-3
(N)	(507)	(601)	
Urban unskilled labor, not high school graduates	41%	20%	21
(N)	(160)	(419)	
Urban skilled labor, not high school graduates	37%	29%	8
(N)	(150)	(328)	
Urban labor (skilled & unskilled), high school graduates	47%	31%	16
(N)	(186)	(656)	

Source: Pooled data from eight Gallup polls conducted between February 1955 and December 1963.

Table 2

Churchgoing of Southern and Non-Southern Urban White Collar and Urban Business-Professional Populations (Protestant High School Graduates Only)

% who went to church the previous Sunday

	South	Non-South	Difference (South)-(Non-South)
Business and professional	65%	38%	27
(N)	(225)	(890)	
White collar	48%	46%	2
(N)	(80)	(465)	

Source: Pooled data from eight Gallup polls conducted between February 1955 and December 1963.

> When asked what person they most admire, Southerners are twice as likely as other Americans to name a relative or someone living in their local community.
>
> When asked where they would most like to see a son go to college, Southerners are more likely than any other Americans (except New Englanders) to name a school within their own region. Two-thirds do so, despite the objectively low quality of Southern institutions. (Only 3% of non-Southerners chose Southern schools.)
>
> When Southerners are asked where they would most like to live, they have consistently (since the question was first asked in 1939) been more likely than other Americans to choose their present state of residence. (Nearly three-quarters did so in 1963.)

These differences (and, we may assume, the underlying difference in localism which they indicate) have not changed appreciably in the recent past, and there is every reason to suppose that they will be with us for some time to come. Straightforward projection of the trend data indicates as much, as do statistical controls for education, occupation, and urban-rural residence, which reduce the regional differences only slightly.

Not only is the absolute level of localism in the South different from that elsewhere, its correlates are different as well. Localism might be expected to be particularly characteristic of rural and small-town folk. Table 3 shows the responses to a Gallup Poll question (pooled from three occasions on which it was asked) which taps one aspect of what we mean by "localism": a tendency to find one's models for behavior and belief close to home. If we may judge by this table, only in the South is it true that "cosmopolitanism" is primarily a big-city phenomenon. Outside the South, most people are fairly "cosmopolitan" regardless of their social location. In this case, the largest regional differences are to be found among the rural and small-town populations, but note that regional differences do persist among at least some urban groups.

"There are kinds and kinds of provincialism," Thomas Wolfe wrote in his notes. "New England is provincial and doesn't know it, the Middle West is provincial, and knows it, and is ashamed of it, but, God help us, the South is provincial, knows it, and doesn't care." If "provincialism" means local loyalty and a deference to local opinion, it appears that Southerners are relatively provincial, and will likely remain so. A dash of provincialism is not necessarily shameful, however. It may even figure in the South's redemption.

The New South: The Old Culture

The South's challenge in this century has been to convert

Table 3

Localism of Various Southern and Non-Southern Population Groups

% naming family member or local figure as "man . . . most admired"

	South	Non-South	Difference (South)-(Non-South)
Rural farm, not high school graduates	29%	20%	9
(N)	(300)	(343)	
Rural farm, high school graduates	40%	13%	27
(N)	(90)	(211)	
Town, blue collar high school graduates	38%	17%	21
(N)	(45)	(199)	
Town, white collar high school graduates	13%	10%	3
(N)	(38)	(84)	
Town, business and professional high school graduates	26%	12%	14
(N)	(73)	(200)	
Urban, blue collar high school graduates	27%	18%	9
(N)	(104)	(581)	
Urban, white collar high school graduates	6%	14%	-8
(N)	(54)	(361)	
Urban, business and professional high school graduates	20%	15%	5
(N)	(104)	(704)	

Source: Pooled data from Gallup polls conducted in 1958, 1963, and 1965. The question asked: "What man that you have heard or read about, living today in any part of the world, do you admire the most?" Codes differed somewhat on different surveys. See Reed, The Enduring South, p. 36.

its great endowment of natural resources into material well-being for its people. "The paradox of the South," a government commission observed in 1938, "is that while it is blessed by Nature with immense wealth, its people as a whole are the poorest in the country."[17] Much of the political, entrepreneurial, and intellectual energy of the region has been devoted to resolving this paradox, and as we have seen, these efforts have largely succeeded.

Yet thoughtful Southerners have always looked "beyond the flesh-pots" to the social and cultural implications of economic development, and the problems waiting there are no less daunting than the economic problems now being overcome.[18] These new problems have been previewed for us by the literature and social commentary of the more developed and industrialized sections of the United States: anomie, depersonalization, loss of community, alienation, the "problem" of leisure . . . . Southerners have not been insensitive to the possibility that, in gaining the world, they may lose much of value: certainly one of the most scathing critiques of industrial society ever mounted was the work of Southerners, the Vanderbilt "Agrarians," whose analysis moved some of them to reject industrialization altogether.[19]

Most of the Agrarians' contemporaries, however, confronted with obvious and insistent problems of poverty, bigotry, ignorance, and disease, seem to have felt that the evil of the day was sufficient thereto, and that the problems of industrial society could be addressed when the South had achieved an industrial society to generate them. Since 1930, Southerners have overwhelmingly voted with their dollars to reject the Agrarian position--probably without ever seriously considering it--and as a program it is now (if it ever was not) academic, in the sense of the word which means "irrelevant."[20]

Yet the questions which the Agrarians raised were valid ones. The benefits of industrialization are already evident: in the pay envelopes of Southern workers, in the statistics of magazine circulation, in public health reports, in state budgets for higher education, in nearly every census statistic. Is there reason to suppose that we shall escape the unpleasant consequences?

I think there may be. Southern religion, for all its shortcomings, will no doubt continue to provide individual Southerners with a needed sense of transcendence and personal worth--a sense difficult otherwise to maintain in a society increasingly estranged from nature, in which the individual "objectively" counts for less each day. The rootedness and sense of community evident in Southern culture will also be a valuable asset, serving to offset the possibly disintegrative effects of Southerners' new modes of earning their livings. The Southern tradition of personalism (and that of good manners in secondary interaction) may serve to take off the edges of the New South and reduce the petty and seemingly pointless day-to-day annoyances which I suspect are the real reason many Southerners dislike the Northeast.[21]

Industrialization is not disruptive only of individual psyches, of course. If the cities of the New South are not to become examples of "Southern efficiency and Northern charm" (to borrow John Kennedy's characterization of Washington, D. C.), their citizens must have the will and the wherewithal to make them otherwise.[22] Here again, their culture may prove an asset. If the South is to assimilate and to domesticate industrialism, much of the impetus will probably come from what we have been calling "localism." One need not be a thoroughgoing Burkean to believe that public spirit is most often anchored in affection for kin and community. A man who loves his town and its idiosyncracies and who cares what his neighbors think will probably be a better citizen than one whose concern with his community ends with the convenience and services it provides for him. If Southern localism can find expression in boosterism of the crassest and most undiscriminating sort (as when a Chamber of Commerce official boasts that Charlotte's "topless" clubs attract "an estimated 5000 people from other towns across the Carolinas and Virginia . . . every day"), it may also have something to do with the pioneering historic preservation work of Charleston and Savannah, with the recent determination of many communities to make school desegregation work, and with the unsung efforts of hundreds of thousands of Southerners to make their towns and cities better places to live.23

It is a sociological truism, of course, that good intentions are insufficient without facilitating institutional arrangements, but I believe the South is fortunate in this respect as well: it has its remarkable churches. The sins of the Southern churches have been and are many, sins both of commission and (notably) of omission, but many Southerners who feel that the churches could use a good reformation are nevertheless profoundly grateful that there is something there to be reformed: as a resource for Southern communities and for the region as a whole, the churches may well prove to be invaluable. For whatever reason, Southern churches have been more concerned with the Fall of Man than with the rise of industrialism and (as my colleague Dick Simpson put it) more with the next world than with the Third World. If choices must be made, one observer, at least, would not quarrel with these, but there are encouraging signs that many Southern churchmen are beginning to feel that churches as mighty as theirs can and should be concerned with more. The energies and assets at the disposal of Southern churches are immense, and--as Southerners become wealthier--are increasing. Although much has been dissipated in the past (in ostentatious building programs, for instance; in ill-considered anti-liquor campaigns; or, lately, in bigoted misadventures in parochial education), the good works of Southern churches have been many, and can be expected to increase in both scope and depth. The region is blessed indeed to have a tradition of voluntary and relatively selfless contribution to what is seen as community well-being, and to have a working institutional mechanism for it.

As the South was endowed by Nature with the resources to meet the fundamentally economic problems of this century, its history may have given it the basis for working solutions to some of the problems of the next. It is apparent that, despite heroic changes in the "technological order" of the South, there is considerable continuity in the "humanistic order," and it appears that some aspects of the latter will serve to meliorate and to modify the effects of the former. If the South has not accepted John Crowe Ransom's advice to "accept industrialism, but with a very bad grace, and . . . maintain a good deal of her traditional philosophy," it has at least not modeled itself entirely on the urban Northeast, and much of what has been preserved may serve Southerners well in the future.[24]

Notes

[1] By no means a new observation, this was remarked, for instance, by Rudolf Heberle, "Regionalism: Some Critical Observations," Social Forces, XXI (March 1943), 280-286. Compare J. S. Reed, The Enduring South: Subcultural Persistence in Mass Society (Lexington, Mass.: D. C. Heath, Lexington Books, 1972).

[2] See, for example, John C. McKinney and Linda Brookover Bourque, "The Changing South: National Incorporation of a Region," American Sociological Review, XXXVI (June 1971), 399-412; or Leonard Reissman, "Social Development and the American South," Journal of Social Issues, XXII (January 1966), 101-116. For a summary of some data on vanishing differences, see J. S. Reed "Continuing Distinctiveness in Southern Culture," University of North Carolina News Letter, LV (December 1970).

[3] E. g., Alfred O. Hero, Jr., The Southerner and World Affairs (Baton Rouge: Louisiana State University Press, 1965); Norval D. Glenn, "Massification versus Differentiation: Some Trend Data from National Surveys," Social Forces, XLVI (December 1967), 172-180; idem. and J. L. Simmons, "Are Regional Cultural Differences Diminishing?" Public Opinion Quarterly, XXXI (Summer 1967), 176-193; Reed, "Continuing Distinctiveness"; idem., The Enduring South.

[4] An early reminder was Nathan Glazer and Daniel P. Moynihan, Beyond the Melting Pot (Cambridge: M.I.T. Press, 1963).

[5] L. Paul Metzger, "American Sociology and Black Assimilation: Conflicting Perspectives," American Journal of Sociology, LXXVI (January 1971), 627-646. See also Nathan Glazer, "Blacks and Ethnic Groups: The Difference and the Political Difference it Makes," Social Problems, XVIII (Spring 1971), 444-461.

[6] White Southerners (New York: Random House, 1970); The Enduring South. See also Raymond W. Mack, "Is the White Southerner Ready for Equality?" in The Changing South (n.p.: Aldine Publishing Company, Trans-action Books, 1970), 9-20.

[7] White Southerners, 91-119.

[8] The symposium, on community and identity in the modern South, will be edited by Harold Kaufman and J. K. Morland. I tried, in The Enduring South, to address the problem which the finding of cultural continuity in the face of economic change poses for social theory, and several of the chapters in George Dalton, ed., Economic Development and Social Change (Garden City, N. Y.: Natural History Press, 1971), are also relevant. Although this article deals more with the consequences of subcultural persistence in the South than with its causes, one might surmise that the effects on an existing culture of importing a "mature" industrialization--in which workers spend more waking hours off the

job than on and in which other values compete with short-run efficiency in the managerial calculus--are different from those of an indigenous industrial revolution. Another difference between Southern and non-Southern industrialization--perhaps due to the same factor--is structural: Southern industrialization has not generated as large a middle class. (Glaucio Ary Dillon Soares, "Economic Development and Class Structure," in Reinhard Bendix and Seymour Martin Lipset, Class, Status, and Power, 2nd. ed. [New York: The Free Press, 1966], p. 198.)

[9] Even the hours on the job may be different, of course. The primary work group has been rediscovered so many times that its importance should be taken as axiomatic by now. See, for example, Peter M. Blau and W. Richard Scott, Formal Organizations: A Comparative Approach (San Francisco: Chandler Publishing Company, 1962), pp. 87-115.

[10] William H. Nicholls, Southern Tradition and Regional Progress (Chapel Hill: University of North Carolina Press, 1960), argues the incompatibility between some aspects of Southern culture and American industrialism.

[11] Glen Elder and I are presently conducting a program of research which, we hope, will help meet the immediate need, mentioned above, of documentation. The data reported and discussed below, however, are taken entirely from The Enduring South, chapters four and six.

[12] See, for example, the essays in Samuel S. Hill, Jr., ed., Religion and the Solid South (Nashville: Abingdon Press, 1972). The taxpayers of my adopted state would be gratified to learn that one of the first things I noticed when I came to their state university from a Northern graduate school was how many undergraduates, graduate students, and even faculty members were practicing churchmen. A recent Gallup Poll confirms my impression. Southern college students are much more likely than their non-Southern peers to agree that "organized religion [is] a relevant part of [their] life at the present time" and that "religion can answer all or most of today's problems." Southern college students were the only regional group in which a majority agreed with either statement. ("Religion in America, 1971," The Gallup Opinion Index, Report No. 70 [April 1971], pp. 52-53.)

[13] "Communicating with the Educationally Deprived," Mountain Life and Work, XLII, 1 (1966), p.10.

[14] Talcott Parsons, The Social System (New York: The Free Press of Glencoe, 1951), pp. 61-63 et passim. Cf. Florence F. Kluckhohn and Fred L. Strodtbeck, Variations in Value Orientations (Evanston, Illinois: Row, Peterson, 1961), pp. 1-48.

[15] Robert K. Merton, Social Theory and Social Structure, Rev. ed. (New York: The Free Press of Glencoe, 1957), pp. 392 ff.

[16] This Southern localism is beginning to be reflected in migration statistics. It is probably well-known by now that the decade of the sixties showed, for the first time in this century, a net white in-migration to the South. It may not be so well-known that a very large proportion of the in-migration was _return_ migration of the Southern-born who had left the region, presumably to follow economic opportunity elsewhere. The demographic characteristics of these migrants (relatively well-educated, well-off urban or suburban folk) make it clear that homesickness is not exclusively a property of the audiences for country music.

[17] National Emergency Council, _Report on Economic Conditions in the South_ (Washington, D. C.: 1938), p. 8.

[18] See, for instance, Rupert B. Vance, "Beyond the Fleshpots: The Coming Culture Crisis in the South," _Virginia Quarterly Review_, XLI (Spring 1965), pp. 217-230.

[19] Twelve Southerners, _I'll Take My Stand: The South and the Agrarian Tradition_ (New York: Harper & Brothers, Harper Torchbook, 1962--first published 1930); Donald Davidson, _The Attack on Leviathan: Regionalism and Nationalism in the United States_ (Chapel Hill: U. of North Carolina Press, 1938).

[20] The continuing relevance of the Agrarian critique (as opposed to their program) was recently emphasized by Edwin M. Yoder, Jr., in "The Greening of the South," _Book World_, 4 July 1971, p. 7.

[21] That much of the old Southern culture has been psychologically functional--as well as simply pleasant--for many who shared in it is, of course, implicit in the writings of the Agrarians. For a good statement of the case, see the article by their colleague Richard M. Weaver, "The Regime of the South," _National Review_, 14 March 1959, pp. 587-589.

[22] Joel L. Fleishman argues that there is still time, although only a generation at the most, to bring the South's urban-industrial development under control and prevent "a growth which will shape our cities in the same patterns with the same problems, plunging us into the same moral and physical discomfiture as cities to which we are, or have recently been superior." ("The Southern City: Northern Mistakes in Southern Settings," in H. Brandt Ayers and Thomas H. Naylor, _You can't Eat Magnolias_ [New York: McGraw-Hill,]1972 .)

[23] The Charlotte official is quoted by Harvey Harris, in "Censorship in Respectable Disguise," _Greensboro Daily News_, 19 December 1971, p. C-1.

[24] Ransom, "Reconstructed but Unregenerate," in _I'll Take My Stand_, p. 22.

THE EFFECTIVENESS OF EXTENSION NONPROFESSIONALS IN AGRICULTURE

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ABSTRACT

The purpose of this paper is to determine if Extension staff members can contribute to the appraisal of characteristics associated with effectiveness of nonprofessionals employed as agricultural aides in Extension education programs for hard-to-reach audiences in the lower-income farm strata. The findings of this study indicated changes made by participating farmers over a three year period in utilization of selected USDA agencies and gross farm income were significantly associated to Extension staff judgments of the personal and character traits of the agricultural aides. A personal and character trait scale is provided as a suggested guideline for Extension when interviewing applicants for possible employment as agricultural aides in Extension education programs for low-income farmers.

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THE EFFECTIVENESS OF EXTENSION NONPROFESSIONALS IN AGRICULTURE

During recent years, there has been a growing interest by Cooperative Extension Service in the utilization of indigenous nonprofessionals as program aides in educational programs for hard-to-reach audiences. "A People and A Spirit"[1] recommended that over 52,000 aides be employed by 1975 to augment the professional staff in working with hard-to-reach audiences.

One Extension program that utilizes nonprofessionals as aides is the Expanded Food and Nutrition Education Program for low-income families. A nationwide evaluation of that program gave much credit to the 4,700 aides who worked directly with hard-to-reach families in poverty in convincing them of the need for improving diets and demonstrating how family income and skills could be used more effectively to improve diets.[2]

Nonprofessionals also are being utilized as aides in Extension education for low-income farm families. The general purpose of agricultural aides is to work with hard-to-reach farmers in poverty on an intensive basis to effect changes in production agriculture, management, and level-of-living.

Although aides have proven to be quite effective in the fields of public health and nutrition, evidence of their successful use in agriculture Extension education is lacking. Because there has been little relevant research and because of a growing interest in the use of nonprofessionals as agricultural aides, Extension Service, USDA, provided a grant of Special Needs funds to help support this research project. The purpose of this study is twofold:

1. To determine if nonprofessionals are effective as aides in Extension educational programs for hard-to-reach audiences in the lower-income farm strata.

2. To determine if Extension staff members can contribute to the appraisal of characteristics associated with effectiveness of aides.

Program Background

To meet its obligation of providing educational assistance to small farm operators, the Texas Agricultural Extension Service organized a pilot program in 1969 entitled the "Intensified Farm Planning Program." This program, referred to as "IFPP," utilized local farmers as program aides in Cooperative Extension education with small farm operators on an intensive basis to help develop the capacity of small farm families to take advantage of socioeconomic opportunities available to them.

Eleven program aides were selected in March 1969, to work in ten Texas counties having a high incidence of poverty and with farmers who were not active in ongoing Extension education programs. Due to the death of one aide and the termination of another, this study will be concerned with nine counties and nine aides.[3] At the time of employment, the median age of the aides was 44 and the range was 24 to 59. All had some agricultural experience and at least 11 years of schooling.

Extension personnel having knowledge of the personal and character traits of each of the nine program aides at the beginning of IFPP were asked to rate the aides as high or low on each of fifteen personal and character traits. The characteristics selected for use were patterned after theoretical and empirical knowledge gained from literature reviewed for this project. Further discussion of rating procedures is presented in the "Indicators and Measurements" section.

Selection of Cooperators

In selecting farmers to participate in IFPP, each county in IFPP attempted to select farms that were representative of the general population of farms in the lower-income strata within each county. Selected socioeconomic data of farmers participating in the program are shown in Table 1. The average age of participating farmers at the beginning of IFPP was 54 years, average farm size was 125 acres, while average income from the sale of farm products in 1968 was $1,828.00.

(Table 1 About Here)

Although this study is concerned with 176 farmers, evidence indicates that IFPP is serving a much larger audience. However, reliable evidence is not available at this time to account for all those who have been served by the program.

Indicators and Measurements

The purpose of this study is twofold: First, to determine if nonprofessionals are effective as aides in Extension educational programs for hard-to-reach farm audiences in the lower-income strata. Effectiveness of the aides was measured by determining the changes participating farmers made over a three-year period in (1) utilization of selected USDA agencies and (2) gross farm income. The time period covered from which data are used was 1968 to 1971, inclusive.

The second purpose of this study is to determine if Extension staff members can contribute significantly to the appraisal of characteristics associated with effectiveness of aides. Therefore, Extension personnel familiar with each of the nine aides were asked to rate the aides as high or low on fifteen personal and character traits. A value of one was assigned to each trait rated as high and a value of zero to each trait rated as low. Thus, each aide's rating could range from a minimum of zero to a maximum of 15. The personal and character traits utilized in this study are shown on Table 2.

(Table 2 About Here)

The sum total of the 15 items was used as an indicator of each program aide's quality of leadership.[4] However, the number was used to indicate order and not interval. For example, a program aide with a sum total of 15 possessed stronger leadership qualities than an aide with a sum total of 14, but how much stronger is not known.

Spearman's rho (r_s) was utilized to measure the degree of association of Extension staff judgments to aide effectiveness.[5] The .01 level of confidence is the criterion used in this report to determine if a significant association exists between aide effectiveness and staff judgments of aide traits. A significant association would be an indication that Extension staff judgments could contribute to the appraisal of characteristics associated with aide effectiveness.

Findings

A measure of the utilization of services of selected USDA agencies was accomplished by determining the number of farmers who utilized these services in the benchmark year (1968) and in 1970-71.

As indicated in Table 3, there was a distinct increase in the number of farmers utilizing the governmental services in 1970-71 who had not utilized governmental services in the year before IFPP started. There was evidence, also, that some counties realized a greater change in the number of farmers utilizing government services than did other counties.

(Table 3 About Here)

To determine the association of staff judgments to aide effectiveness, the nine counties were ranked according to (1) the number of additional farmers utilizing one or more of the USDA agencies since the commencement of IFPP and (2) Extension staff judgments of the personal and character traits of the aides. As indicated in Table 4, a significant association existed between the two rankings. That is, counties having program aides who were judged as high on the personal and character trait rating had more farmers who utilized the selected USDA agencies than did counties having program aides who were judged as lower on the personal and character trait rating.

(Table 4 About Here)

The second measure of aide effectiveness was changes in gross farm income. Findings in Table 5 indicated that participants increased farm income by nearly one-third from 1968 to 1971.[6] However, considerable variation was noted in the average change in farm income when compared by counties.

(Table 5 About Here)

When the nine counties were ranked by change in gross farm income and aide trait ratings, a significant level of association was determined to exist. As shown in Table 6, counties having program aides judged as higher on the personal and character trait ratings also ranked higher on average changes in farm income than did counties having program aides judged as lower on the character trait rating.

(Table 6 About Here)

Conclusions and Implications

The findings of this study indicated that farmers participating in IFPP did make major changes over a three year period in utilization of USDA agencies and in gross farm income. In addition, these changes were found to be significantly associated to Extension staff judgments of the personal and character traits of the aides employed in IFPP to work on an intensive basis with the farmers in the program.

The selection of nonprofessionals as Extension aides appears to be one of the most important aspects of an intensified farm planning approach. Results of this study would indicate that Extension staff members can contribute significantly to the appraisal of characteristics associated with aide effectiveness.

Although the sample size in this study limits the generality of the findings, the construction of a personal and character trait rating does serve an exploratory function. That is, there are no readily available lists of personal and character traits to serve as guidelines for Extension staff members when interviewing applicants for possible employment as aides in Extension agricultural education programs. It is recommended that additional studies of a comparative nature on a larger scale be formulated to list these and other personal characteristics associated with nonprofessional effectiveness in working with hard-to-reach audiences. If Extension Service is to have a more consistently effective program, it would seem that a more uniform method for interviewing and employing nonprofessionals as program aides in working with hard-to-reach audiences would be desirable.

FOOTNOTES

1. USDA-National Association of State Universities and Land Grant Colleges Study Committee on Cooperative Extension, 1968, "A People and A Spirit," (Fort Collins, Colorado: Printing and Publications Service), Colorado State University.

2. Feaster, J. Gerald. "Impact of the Expanded Food and Nutrition Education Program on Low-Income Families: An Indepth Analysis," Agricultural Economic Report No. 220 (Washington, D. C.: USDA Economic Research Service, 1972).

3. Other obligations caused the aide to terminate after six months of employment.

4. Kendall's coefficient of concordance (W) was tabulated to measure the consistency of the judges' ratings of the leadership traits of the program aides. The computed (W) was .89 indicating a relatively consistent ranking by the judges of the leadership traits of the program aides.

5. For a detailed discussion of this statistical technique, see Dean Champion, *Basic Statistics for Social Research*, 1970.

6. For a more thorough analysis of variations in changes in farm income, see Howard Ladewig and Vance W. Edmondson, "The Effectiveness of Nonprofessionals in Cooperative Extension Education for Low-Income Farmers," B-1122 (College Station, Texas: Texas Agricultural Extension Service and Texas Agricultural Experiment Station,) Texas A&M University.

TABLE 1 Socioeconomic Characteristics of Farmers Participating in IFPP, 1968

County	Number of farmers in program	Average age	Average Size of farm (acres)	Mean income from sale of farm products (dollars)	Number reporting off-farm employment
Cherokee	16	60	80	1,035	13
Falls	15	57	83	2,695	3
Freestone	21	54	166	1,659	19
Guadalupe	15	56	191	3,361	8
Lamar	19	51	90	1,620	15
Lee	19	56	112	1,330	12
Milam	18	56	102	1,045	10
Starr	27	48	202	2,593	11
Washington	26	52	75	1,329	17
TOTALS	176	54*	125*	$1,828*	108

*Weighted Average

TABLE 2 Scale for Measurement of Personal and Character Traits of Extension Aides

Value:
High = 1
Low = 0

Check One		Personal and Character Traits
High	Low	
____	____	1. Breadth of interest
____	____	2. Ability to formulate goals
____	____	3. Ability to communicate
____	____	4. Farming experience
____	____	5. Farming accomplishments
____	____	6. Familiarity with production enterprises
____	____	7. Sociability
____	____	8. Adaptability to problems
____	____	9. Ability to conduct demonstrations
____	____	10. Initiative
____	____	11. Persistence
____	____	12. Aggressiveness
____	____	13. Farm ownership
____	____	14. Farm income
____	____	15. Reputation

TABLE 3 Distribution of 176 IFPP Farmers by Participation in Assistance and Education Program Offered by Selected USDA Agencies, 1968 and 1970-71

Agency	1968 No.	1970-71 No.	% Change
Soil Conservation Service	28	75	167.9
Agricultural Stabilization and Conservation Service	38	104	173.7
Farmers Home Administration	7	47	571.4
Texas Agricultural Extension Service*	3	70	2233.3

*Refers only to attendance at scheduled group meetings

TABLE 4 Association of Extension Staff Judgments of Aide Traits to Aide Effectiveness (Change in Utilization of Selected USDA Agencies)

County	Aide Personal Traits Rank	Change in USDA Utilization Rank
A	8.5	8
B	8.5	9
C	7	7
D	6	5
E	5	6
F	4	4
G	3	1
H	2	3
I	1	2

$r_s = .93$ df = 9 $p < .01$

TABLE 5 Gross Farm Income of 176 IFPP Farmers, 1968 & 1971

	1968	1971	% Change
Farm Income	$321,671	$424,384	31.9
Mean Farm Income	$ 1,828	$ 2,411	

TABLE 6 Association of Extension Staff Judgments of Aide Traits to Aide Effectiveness (Change in Gross Farm Income)

County	Aide Trait Rank	Change in Farm Income Rank
A	8.5	8
B	8.5	9
C	7	6
D	6	5
E	5	7
F	4	4
G	3	2
H	2	1
I	1	3

$r_s = .871$ df = 9 $p < .01$

A SCALE FOR THE MEASUREMENT OF ATTITUDES TOWARD PROPERTY RIGHTS.*

Nicholas A. Holt and H. Max Miller**

During the past, real property rights have been treated more frequently by economists and those in the legal professions than by anthropologists and sociologists. It is the contention of these authors that real property rights represent a social institution that has been considered only in part through legal and economic perspectives. A wealth of demographic information exists that indicates the general trend of outmigration of people from rural areas to more densely populated urban areas. Farms have tended to become larger while the number of farmers has decreased. Assuming this is the case, as it appears to be, a shift or change in the concept of property rights might be expected. Related to this assumption is the fact that institutions are established and maintained by the individuals within a particular society, organization or group. In general then, this tends to confound the concept of rights of property by regional or area definitions. It is in this manner that perceptions of rights of property may differ for different groups even within the same area i.e., corporate interest groups and local farmers or residents may possess widely divergent ideas of rights of property. These differences in the perception of property rights may precipitate legal, economic and social conflicts that could have possibly been avoided had these differences been identified and arbitrated. Also, the implementation of action programs could effect a change of the behavior of one group or the other, and as a consequence tend to ameliorate conflicts arising from differing definitions of property rights. These inherent conflict situations prescribe the need for a social definition and a means of measuring attitudes towards property rights. Our objective in this paper is to indicate how a scale of attitudes towards property rights might be useful in identifying conflict situations.

Conceptualization of Property Rights

Since law is the ultimate arbitrator of disputes in property rights, it becomes necessary to examine briefly the legal limits of rights to property. Real property rights are legally defined,

> ...in the absence of severence, as the physical extent of property in land (which) includes surface rights, rights with respect to the area above the surface and the area beneath the surface. Ownership of the surface may include trees growing upon the land, chattels attached to the land and growing crops.[1]

The limitation of rights to the area above the surface of the land generally refers to that area above the surface that is in the "effective possession" of the owner of the surface. The rights of the owner to use and enjoy his surface and sub-surface propety is limited by legal proscriptions of waste.

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Where others hold claim to the same piece of land i.e., joint tenant or a tenant in common, waste of real property is constituted by permanent damage or relatively permanent devaluation of the land. An owner of real property is also liable for maliciously intended acts which interfere with the "beneficial enjoyment" of ownership to adjacent properties.

Legal definitions of property rights then tend to indicate a norm for behavior below which negative legal sanctions may be incurred. This tells us very little of how these rights exist and are utilized in on-going social systems. As stated by Hallowell,

> If we wish to understand property as an institution in any society our primary concern must be an analysis of the patterns of rights, duties, privileges, powers, etc., which control the behavior of individuals or groups in relation to one another and to the custody, possession, use, enjoyment, disposal, etc., of various classes of objects.[2]

These patterns are sanctioned by custom and law. However, they are operationally validated only through traditional beliefs, attitudes and values.

On the basis of the assumption that attitudes operationally validate custom and law which obtain to property rights, we would contend that a scale of attitudes measuring property rights could be developed. This measure would assess not only the points of conflict but the degree of potential conflict inherent in attitudes involving property rights. Such a scale would permit the development of programs designed to divert or ameliorate conflict resulting as a consequence of divergent attitudinal conceptions of property rights.

Theoretical Background

As we have stated above, the majority of research and writing on the subject of property rights pertains to legal and economic aspects of this phenomena. Anthropological studies have tended, in the past, to deal with property rights in terms of possessions rather than real property. Sociologists have tended to study property rights in relation to the works and theories of Marx and Engels with emphasis placed on property rights in work and socialistic land holdings. Generally, these theoretical frameworks are important but of little immediate benefit in the study of attitudes toward property rights. One empirical work of immediate import was the work by Frederic L. Pryor of Swarthmore College entitled Property Institutions and Economic Development: Some Empirical Tests.

Pryor utilizes two prime assumptions: 1) that certain benefits and costs, in the broad sense of those terms, can be adduced for a given property institution and if these benefits and costs are analyzed in regard to the relevant societal groups, correct predictions can be made about the occurrence of the institution in particular economies, and 2) if the benefits and costs of particular property rights or institutions are related to the level of economic development, then such institutions should appear in a cluster of societies arranged according to their relative levels of development. He utilizes Guttman scaling technique to find if such patterns do exist. Pryor defines development according to four criteria relating to the complexity of the economy: 1) division of labor, 2) level of technology, 3) diversity of production above the barest food necessities, and 4) elaborateness of economic organizations.[3] Pryor goes on to test these assumptions utilizing

Guttman scaling technique to find if certain property institutions are necessary and sufficient for a rise in economic development.

Empirical evidence would suggest that in the three coastal counties of Georgia from which we are sampling, an expected difference should be observable between rural residence and corporate paper companies in terms of their property institutions based on their relative economic development. This explains attitudinal differences between these two groups. However, these authors leave the empirical testing of Pryor's hypothesis relating to attitudes toward property rights for further research in this area.

Application of Scale

This scale of property rights was derived in relation to an action oriented program designed to reduce the incidence of incendiary forest fire in three South Georgia counties. During the exploratory and formulative stages of this action experiment it became apparent that attitudes toward property rights were related to the incidence of incendiary forest fire in this three county area of coastal Georgia. Much conflict, that usually culminated in incendiary fire was generated in this geographical area by the somewhat differing conceptions of "rights in property" on the part of local residents on the one hand and by large land-holding paper and pulpwood corporations on the other.

The items and data for the development of this scale originated in both the exploratory and pre-test phase of the research. The scale was designed as a measure of property rights obtaining to usage of real property. The concept of property usage implies primary and secondary utilization as well as the necessary functions which obtain to such usage along with access of property (access of non-owners to owned property).

Twelve items were selected for the scale that seem to tap the quality of "property rights" on the basis of theory, previous research and knowledge of the phenomenon as obtained from area residents in the exploratory phase of the research. The items expressed desired behavior and had approximately the same number of items stated in "favorable" and "unfavorable" forms. The scale was pre-tested on a sample of 100 subjects and the results were then analyzed from the viewpoint of selecting items for the final battery of the scale. The items and their respective discriminative powers were:

Item	Discriminative Power
1. It takes a "mean man" to own a large piece of land and keep other people from using it.	1.68
2. No one should be allowed to post their land.	1.28
3. If a person wants to burn refuse or undergrowth on his own land it is his own business.	1.20
4. A large corporation owning thousands of acres has no right to close roadways that allow people to cross the land without going all the way around it.	1.20

	Item	Discriminative Power
5.	The county and state governments have no right to prohibit trash, weed and brush burning on an individual's property.	0.92
6.	A man should be able to keep people off land if he (or she) wants to.	0.83
7.	A person should be able to own as much land as he (or she) can afford.	0.80
8.	If a man owns a piece of property, he ought to be able to "put" anything on it that he wants to.	0.76
9.	A paper company should be able to keep people off land if it wants to.	0.68
10.	A paper company should be able to own as much land as it can afford.	0.64
11.	The government or corporations should not be allowed to own property when it interferes with the economic well-being of citizens.	0.60
12.	There ought to be a law controlling pollution caused by burning trash and other burning.	0.52

On the basis of the statement by Goode and Hatt that "...as many items as possible should reflect a discriminative power of 1.00 and few if any should drop below 0.50"[4], all of the statements could be included in the scale.

The final selection of items 1-8 was based on the above discriminative power criteria, with an effort to remain within a reasonable range of Likert's DP value of 1.00. Two other criteria were also applied in the final selection of items, 1) that the items have an equal number of favorable and unfavorable items (items 1, 2, 4, 5 being positive and 3, 6, 7, and 8 being negative) and 2) that the items should exhibit a wide range of weak and strong statements (item #8 representing the weakest statement and item #2 representing the strongest statement).

Guttman scaling criteria was applied to the battery of all twelve items to test for unidimentionality. When the responses were dichotomized, a coefficient of reproducibility of 0.81 was obtained. On the basis of specifie criteria contained in Guttman procedures it was decided that this coefficien of reproducibility was not sufficient for the acceptance of these items for scaling purposes under these criteria. These identical items were scored using the simple-scoring method of Guttman scaling. Only four items remaine after cutting points were established.

Summary and Conclusions

The purpose of this paper was to indicate the growing need and potentia usefulness of a scale for the measurement of attitudes towards property rights. Demographic trends indicate that over a period of time rural land distribution in such areas as the three coastal counties of our study will b comprised primarily of large farms, corporate businesses and a few small farms. A transition to this form of land distribution property rights has the potentiality of being quite problematic for local residents or landholders. We would contend that the ability to adequately measure this phenomenon is a first step in rectifying problems and solving issues in local areas faced with similar problems.

Footnotes

1. William E. Burby, Handbook of the Law of Real Property (St. Paul, Minn.: West Publishing Co., 1965), p. 13.

2. Culture and Experience (Philadelphia, Pa.: University of Pennsylvania Press, 1955), p. 239.

3. Frederic L. Pryor, "Property Institutions and Economic Development: Some Empirical Tests," Economic Development and Cultural Change, Vol. 20 (April, 1972), pp. 406-437.

4. Methods in Social Research (N. Y., N. Y.: McGraw-Hill Book Co., Inc., 1952), p. 276.

Middle Class Lifestyles Among Rural Dominicans

By Virginia K. Murray and John C. Belcher

Introduction:

A basic assumption of demographic transition theory is that human fertility in centuries past could be considered a biological phenomenon that was limited only by fecundity. Then, as the transition process got under way the mortality rates dropped first, followed by declines in the birth rates. Indications are that the birth rates started to decline in the Western world about a hundred years ago. The decline has not proceeded evenly among all the countries of the world. Some still have not experienced significant change. The general consensus among researchers is that the reduction in fertility in the demographic (Beshers, 1967: 37) transition is associated with the diffusion of birth control techniques. The diffusion of knowledge about contraception and its acceptance is reflected in the differentials existing in fertility within nations. The birth rates drop in urban areas before those in the rural areas. Urban areas have been considered the centers in the diffusion of the adoption of birth control procedures.

That urban areas are the center of the diffusion of contraceptives is supported by the characteristic differentials that exist among occupational and other socio-economic groups. The high status urban occupations have the lowest birth rates. Education is, of course, related to occupational position as is income. Thus, the educated, the wealthy, and the urban, are the first accepting and practicing birth control, while the poor, the uneducated, and the rural maintain a high rate of reproduction. (Beshers, 1967: 37).

There are many countries of the world where the rates of natural increase are very high. The transition process has brought a revolution in mortality but the birth rates remain very high. The rate of natural increase, for example, in the Dominican Republic is one of the highest in the world.

The problems connected with high birth rates are becoming apparent in many underdeveloped countries. Davis has stated that "The rise of the industrial nations elsewhere in the world has had an impact on the less advanced areas; it has brought commerce and political change, and it has brought...a marked decline in mortality. But it has not fundamentally altered the agrarian character of the society and to this extent has not forced a change in the institutional structure. Supported by time-honored agrarian conditions, the social organization has retained many of its elaborate mechanisms for inducing a high rate of reproduction. It has done so even though a high birth rate, once functional, has now become strictly disfunctional." (Davis, 1954-1955, pp. 34).

The situation which Davis describes is an apt appraisal of the Dominican Republic. In the Dominican Republic the common correlates of differential fertility, such as occupation, income, and religion, are of little help in explaining fertility (see Murray, 1973). However, according to Bogue, the Dominican Republic had completed only 27.7 percent of the demographic transition by 1960 (1960: 665). Thus, social differentials in fertility are almost insignigicant in numbers of children to whom rural Dominican women have given birth.

This paper will be directed toward examining the fertility patterns of a small group of residents of the rural Dominican Republic who have what we have designated as a middle class style of life. It is assumed that this small segment of the rural Dominican population represents a break from traditional life patterns in the nation. Following the argument of Lerner we would expect the members of this group to possess a "mobile personality". Lerner states: "The mobile person is distinguished by a high capacity for identification with new aspects of his environment; he comes equipped with the mechanisms needed to incorporate new demands upon himself that arise out of his habitual experience (1958, pp.49). Lerner feels that this personality type is characteristic of modernized societies and that the modernization of any society involves the characterological transformation to the mobile personality (Lerner 1958, pp. 50-51).

It may be hypothesized that rural people with this mobile personality would be the forerunners to the demographic transition.

Much the same idea has been expressed by Beshers:

"The high fertility in the first stage of the demographic transition is a consequence of a set of customs which are adhered to by persons acting in the traditional mode of orientation. The innovators who adopt family planning are persons acting in the purposive-rational mode. The diffusion of family planning is limited to the persons in the population acting in the purposive-rational mode. Those in the traditional mode or in the short-run hedonistic mode cannot acquire these practices; however, persons are capable of changing modes. The fertility behavior of planners is represented by the purposive-rational mode--that is, by equations that represent sequential decision making of a highly calculating type". (Beshers, 1967, pp. 87-88).

There would appear to be much similarity between the concepts mobile personality and purposive-rational mode.

The purpose of this study is to extract from the masses of rural Dominicans, those individuals who would seem to have the attributes of these personality types. However, rather that examine personality characteristics, we are approaching the problem by studying a configuration of behavior which we have designated as a middle class style of life.

The Style of Life Concept:

The phrase "life style" is very widely used in the sociology literature. However, there has not been any standardization of usage. Style of life, thus, has become a phrase to which many meanings have been attached, ranging from patterns of self perception to universal attributes (McGuire, 1952: 109-115; Williams and Wirths, 1965; and Feldman and Thielbar, 1972). Thus, some specification of the term is necessary if it is to be used as a concept in this study.

The focus of the usage in this study is upon consumption patterns. It is in this context that Max Weber first used style of life (Gerth and Mills, 1958: 186-194). He distinguished between social classes which were defined basically in terms of relationship to the economic system whereas status groups were characterized by variations in patterns of use of consumer goods which he designated as style of life. He stated that these status groups often had an occupational base but not necessarily so. The members tend to interact with shared conventions, laws, and rituals.

Mayer and Buckley note that "of paramount sociological importance is the realization that in modern societies the economic order and the status order are closely related but not identical; therefore classes and status groups must be carefully distinguished (1970:46).

One assumption of this approach to style of life is that in any society or community with several thousand inhabitants there would be several numbers of configurations of cultural norms. The term style of life is used to represent these clusters. Consistent with the thinking of the Weberian social theorists, each of these styles of life is enacted by a distinct "status group". Style of life, thus, is analogous to what some have called "subculture". Subculture is not used in this analysis because it implies that some behavioral systems exist independently of the dominant society. Style of life, by contrast, might be viewed as constellations of cultural alternatives existing within a society. One would usually follow the same style of life as the reference group with which he interacts. However, in a situation where an individual may be separated in time and space from his reference group, as in the case of the innovative rural resident, face-to-face interaction is not a necessary condition for a given life style.

Many studies have either intensively investigated the fertility practices within a given social class or have presented the statistical relationship between birth rates and some indicator of social class. (Easterlin, 1970: 127-156, Peterson, 1969: 496-518). Typical of the conclusions reached from these studies is the following statement, "Differences in life styles associated with position in a status hierarchy presumably may influence any of the norms or intermediate variables affecting fertility." (Freedman, 1961-62: 39). Students of social stratification often discuss distinctive life styles for the various social classes (Hodges, 1964: 130-171). Stratification schemes generally have not been based on behaviors but upon attributes quite distinct from cultural norms and the existing social structures. Measures of social class position tend to be based on such external criteria to behavior and structure as occupation, income, or education. At times one or more of these characteristics are used with others such as residential area to determine class position. (Warner, 1949). Such usage often assumes that social classes form a unidimensional, hierarchal pattern and differential life styles are concomitant variations.

In the present study we equate style of life with status groups rather than social class. For the purpose of our analysis we are unconcerned with the position of these status groups in the ordering of power or prestige. The emphasis is upon the group of rural innovators who possess what we designate as a "middle class" style of life, no hierarchical relationship in intended.

It is assumed that the reference groups of those with a middle class style of life are found among the urban dwellers and members of more modernized countries. The authors would characterize a person with a middle class style of life as one who is required to fill a large number of roles, is required to interact with a large number of people, and is required to react to a large number of objects. Thus the reference groups of these people would be expected to be further removed in space than those of other rural Dominicans.

The fertility patterns of those with a middle class style of life should be different from those with a traditional style of life. We are thus hypothesizing that a middle class style of life is characterized by behaviors that reduce fertility. In order to test this contention a precision matching from a sample of 1,698 was performed. The 48 top scorers on a "middle class life style scale" were matched with low scorers on the scale in terms of education, occupation, income, marital status, and religion.

Data Collection:

The data for this analysis come from a survey taken in the rural Dominican Republic in 1967. The sample may most accurately be labeled a multistage cluster sample. Interview schedules were secured from nearly 100 different settlements in the rural Dominican Republic. All of the interviewers except one Puerto Rican graduate student were highly skilled Dominicans, most of whom had previous interviewing experience. The refusal rate was less than one percent.

A total of 2100 interviews were collected, but 57 of the schedules were discarded during the editing and coding process leaving 2043 for analysis. All available evidence indicates that the sample is representative of the rural areas of the Dominican Republic.

The interview schedules contain information on fertility, social participation, level of living, and various background items, however, the major basis for the present study was the inclusion on the survey instrument of questions feflecting norms where cultural variation was permissable.

Measurement of Style of Life:

The generic conceptualization of style of life required three phases to arrive at measureable components. Forty-three different items believed to reflect social behavior were selected for factor analysis. These behaviors included a broad range of activities such as whether food was produced at home, if wife worked outside the home, reading practices, time of arising in the morning, and decision making in the home. Utilizing a principle component solution and varimax rotation procedures, the first four factors were selected to initially characterize life style components.

These factors were: Middle class syndrome; Evening Leisure; Self Sufficiency; and Male Dominance.

A subscale was constructed to measure each of these factors. These subscales were then used to differentiate the sample into various life styles. However, because of the theoretical similarity of the factor labeled "Middle Class Syndrome" and Lerner's indicators of a "Mobile personality", it was decided to test the influence of this single factor on fertility patterns. However, the number of families scoring high on the "Middle class syndrome" subscale was too small to permit cross sectional analysis. Therefore, to test the influence of this behavioral syndrome on fertility, household heads with high scores were precision matched with others from the total sample. The characteristics on which matching was done were those that have been found to be associated with fertility differentials: education, income, occupation, marital status, and feligion.

Data Analysis:

As a result of the matching procedures we secured 47 pairs having essentially the same socio-economic characteristics. All were Dominicans living in rural areas. They differed in that one set had the Middle class way of life and the other had what was labled as a traditional style of life.

The birth rates in the Dominican Republic are among the highest in the world. The levles of fertility in the total sample of 2,043 from which the matched pairs were drawn are also high. The average projected fertility for the sample is 8.1 children. For the matched subsamples it is lower, probably because the groups were from higher socio-economic levels.

Those with a middle class style of life had an average projected fertility of 5.5 children and those with a traditional style of life had an average projected fertility of 7.5 children. These differences are extremely important because the groups were matched in terms of most of the variables that are normally correlated with fertility. These differences in fertility give strong support to the claim that a middle class style of life operates to lower fertility in some manner. A projected fertility differential of two children seems all the more important in light of the fact that previous investigations show few relationships to fertility in the Dominican Republic.

Comparing the matched groups on children ever born reveals the same pattern as for projected fertility. The group with a middle class style of life has an average children ever born of 4.8 children, whereas the average for the traditional group in 6.2 children.

The problem, thus, becomes to determine what factors are responsible for these gross differences in fertility between the two matched groups.

One possibility would be, of course, differences in aspirations for children. The respondents were asked two questions pertaining to ideal family size. The first question was, "In your opinion, how many children are there in the ideal family?" The second was, "How many children would you consider as ideal for your own family?" The traditional group had a mean ideal family size of 5.5 to the first more general question and of 6.0 children to the more specific question pertaining to their own family. This response pattern was reversed for those with a middle class style of life. The middle class group had an average of 5.0 children to the general question and 4.6 to the more specific. An important point to note here is that for both of these questions the group with a middle class style of life has an ideal family size closer to their projected fertility than does the traditional group. This might well be interpreted as an indication of greater awareness of methods of contraception on the part of the middle class group. Given our theoretical framework this would be expected, but since no information was collected on contraceptive practices, this interpretation remains no more than a plausible hypothesis.

There were also differences in family structure between the traditional and middle class groups. In the nuclear family category, those respondents who had only a male head, a female head, and children residing in the household were included. The response category of extended family included only those with a male head, a female head, children and other relatives.

Table 1

Family Structure	Middle Class (Percentages)	Traditional (Percentages)
Nuclear	48	72
Extended	27	11
Other	25	17
Total Answering	48	47
Total	100	100

The group with a middle class style of life has 48 percent of its families with a nuclear structure, whereas, the traditional group has 72 percent of its families with a nuclear structure. One can thus see that there is a significantly higher percentage of nuclear families in the traditional group. At first glance one would be led to predict the opposite finding due to the fact that the nuclear family structure is highly correlated with the processes of modernization and industrialization, but this interpretation is negated by the fact that our sample is entirely rural. Because the number of people a person interacts with is probably a component of a middle class style of lide, and because an extended family structure would give more opportunity for interaction, this finding would have some theoretical, although unexpected significance.

Many studies have attempted to relate differences in fertility to a variety of social and psychological variables. The first study which attempted this on a large scale was the Indianapolis Study (Whelpton, 1958). This study was a pioneer attempt to go beyond statistical categories and to relate fertility to some of the complex causal factors underlying reproductive behavior, but it met with very little success. Since that first attempt many other researchers have tried to unravel the social-psychological variables underlying fertility differences, and they too have met with only limited success. Our success in this area was slightly greater.

One of the variables that the survey data permit relating to fertility is the scores on a scale for measuring the amount of fatalism. One would expect the traditional group to be more fatalistic in their feelings of control over their environment. On the fatalism scale a lower score indicated a more fatalistic attitude. The average score on a scale from 0 to 9 was 4.1 for the traditional group and 4.6 for the middle class group. Thus, the scores are in the expected direction but the differences are slight.

An interaction scale based on Caplow's Neighborhood Interaction Scale (Caplow, et al. 1964) was used, and an average interaction score for each respondent was obtained. Using this measure, the differences between the two groups, although in the predicted direction, were very small. The middle class group had an average score of 6.1 whereas the traditional group had a score of 6.0.

Social participation was measured using Donald Hay's Scale for the Measurement of Social Participation of Rural Household's (Hay, 1948). This scale measures social participation in formal organizations in the community, and is based on both the number or organizations a person belongs to and the positions that are held within the organization. The difference in social participation between the males of the two groups was small, 2.8 for the middle class group and 2.7 for the traditional. The difference between the females though was greater--3.4 for the middle class group and 2.6 for the traditional group.

A within group comparison in social participation scores should also be noted. Within the traditional group the social participation of males is higher than that of females. For a rural area in a pre-industrial country, this would certainly be expected. However, for the middle class group the social participation of females is higher that that of the males, thus indicating a break from traditional male-female roles.

The joint social participation scores of males and females show an even larger difference between the two groups. The combined scores for the middle class group are 7.2 whereas, the score for the traditional group is only 4.9.

These differences, although slight in some instances, are especially important for two reasons. First of all for the total Dominican sample none of the social-psychological variables correlated very highly with fertility. Secondly, past attempts at predicting the relationship of social-psychological variables and fertility have been notably unsuccessful. Thus, the differences existing between the precisely matched groups become even more significant. The approach would appear to hold promise for further investigation.

Conclusions:

In conclusion, this paper has been concentrated on the exploration of two small groups of rural Dominican residents, those with a Middle Class Style of Life and those with a more traditional life style. As the name implies, we feel that the traditional group relies on traditional ways of acting, thinking, and feeling. Conversely, the group which we have designated as Middle Class seems to be breaking from tradition in a number of ways. Those with a Middle Class style of life are the ones who read the newspapers and attend the movies. They are the ones who participate in the formal organizations of the community, and the ones who look outside of the community for their reference groups.

As has been shown, this style of life has implications for fertility behavior. The people with a Middle Class style of life not only want less children but have less children than those with a more traditional life style. The projected fertility of the Middle Class group was lower than that of the traditional group by a significant margin. The two groups also differed in the expected direction in regard to children ever born and ideal family size. When it is realized that so few variables bore a clear relationship to fertility in the Dominican Republic, the importance of these findings becomes all the more evident.

The findings relating to the social-psychological variables, such as Interaction and Social Participation scores, were also in the predicted direction. Thus we might claim at least a beginning in trying to unravel the mysteries connecting the social-psychological variables to fertiltty.

It thus seems plausible that the people with a Middle Class style of life are the forerunners to a transition in fertility patterns. These are the people who are setting the standards which will be followed by others as the process of modernization progresses.

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SOCIAL STATUS AWARENESS AS EXPRESSED IN FOOD HABITS AND ATTITUDES OF HOMEMAKERS IN TWO LOUISIANA COMMUNITIES

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Introduction

In societies where social distinctions are made between people, distinctions are generally made in what is considered proper food and service for the various social classes. Since food is a necessity consumption item, the rituals and customs surrounding food selection and service may be studied as indicators of homemakers attitudes toward social status attainment. The research reported in this paper was designed to assess the significance of food as a social status symbol to homemakers in two Louisiana communities--one South Louisiana predominantly Catholic and one North Louisiana predominantly Protestant.

Theoretically, attitudes are thought to be interrelated and interconnected in such a way that several attitudes held by an individual may fall under one societal value system; or, one attitude may fall under more than one value system. The Concern for Social Status Index developed in this study can be conceptually related to two societal value systems listed by Robin Williams (1970, p. 457 & p. 485): Achievement-Success and External Conformity. The interrelatedness of these two value systems was noted by Williams (1970, p. 485). "Men universally seek the approval of some of their fellows and therefore try to be "successful" by some shared standards of achievement or conformity."

A homemaker's concern for the image of her family in the community should be revealed in the distinctions she makes between foods and by her adherence to certain approved customs surrounding food service.

This research was designed to specifically investigate (1) the relationship of attitudes of homemakers toward food and food service as social status symbols to the socio-cultural variables of ethnic locality, race, locality by race,

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income, educational level, age of homemaker and age by race and (2) the specific food items which are regarded as high status, low status and unacceptable by the homemakers included in the study.

Methodology

Sample

Homemakers from a systematic random sample of 362 households were interviewed in two Louisiana communities. The towns were selected on the basis of the following criteria: representative of a distinct subculture, a trade center for a surrounding farming area, and a population between 4,000 and 8,000. The population of the French-Catholic community was 4,942 with 29 percent Blacks. Ninety-five percent of the sample from this community were members of the Catholic Church. The population of the Non-French Protestant community was 6,432 with 48 percent Black. Ninety percent of this sample belonged to a Protestant Church. A household met the sample quota if a responsible adult female with either a husband or a child or both resided in the house. In other words, some kind of family relationship was necessary in order for a woman to be included in the sample. The refusal rate was about four percent in each town.

Attitude Index Construction

Fourteen attitude statements related to social status were constructed. Four response categories - agree, somewhat agree, somewhat disagree and disagree - were coded 1, 2, 4, and 5 with 5 being the most favorable toward the attitude. A neutral score of three was assigned to items that a few respondents would neither agree or disagree with. Most items on this particular index did not apply to four respondents who never had guests for meals. All statements were randomly assigned among a total of 71 attitude items.

All items thought to be related to the Concern for Social Status Index were analyzed by principal component or unrotated factor analysis. Items with low factor loadings were eliminated until only those statements with a factor weight of 0.4000 remained in the index. Since the square of the loading multiplied by 100 equals the percent variation that an item has with an unrotated pattern, the items retained had 16 percent or more of their variation explained in the index. The seven items retained are shown with their factor loadings, means, and standard deviations in Table I. Index scores for each respondent were calculated by multiplying the response score--1, 2, 3, 4, or 5--by the factor loading weight of each variable in the index. The sum of these weight-times data products for all of the selected variables yielded an index score for each individual. The possible maximum range for the index was 3.6670--18,3666. One respondent scored the possible maximum and nine women scored the minimum. The mean was 10.1961 and the standard deviation was 3.4186.

Analysis of Variance of Index Scores

The index scores were analyzed by Least Squares Analysis of Variance by the following independent variables: town, race, town by race, education, income per person, age, and race by age. Interval level data were used for the variables of education and income. The age variable was divided into two categories of less than 45 and 45 and over because this was part of a more comprehensive study of dietary habits. Age 45 is generally considered as being beyond the childbearing age; therefore, nutritional recommendations are different for the two age groups.

Identification of High Status, Low Status and Unacceptable Foods

Assuming that social distinctions are made between various foods, three open-end questions concerning high, low, and unacceptable status levels of food were asked the respondents. The question, "What foods would you serve someone you really wanted to impress?" was aimed at determining the foods accorded the highest status by the respondents in this sample. "What foods, if any, does your family eat that you would rather not serve to guests?" was designed to determine if a low level of status foods exists and if so, what are the foods. The third question, "What foods, if any, do you consider as not good enough for your family?" was aimed at determining which foods were considered unacceptable by the respondents in this study.

Each food category that was mentioned by 15 percent or more by any subgroup in the study was analyzed by one sample, two-tail Chi-square analysis. Town, race, town by race, and N.O.R.C. occupational prestige scores were used as independent variables. The N.O.R.C. scores were divided into three categories: low, 0-49; medium, 50-69; and high, 70 and over.

TABLE I

FACTOR LOADINGS, MEANS AND STANDARD DEVIATIONS OF CONCERN FOR SOCIAL STATUS INDEX ITEMS

ITEM	FACTOR LOADING	MEAN	STANDARD DEVIATION
I like to serve fancier food when I have guests.	0.73778	3.14365	1.80222
My friends try to serve fancy food when they entertain.	0.60956	2.62155	1.7126
It would embarrass me to serve certain foods to my guests.	0.50988	2.43646	1.79182
I serve some foods only on very special occasions because they are too fancy or expensive for everyday use.	0.48373	4.03315	1.58909
My friends expect me to serve expensive food.	0.46028	1.50552	1.19844
I do not cook any different food for guests than I do for my family.	0.43961	2.30939	1.71142
I use my best dishes and tablecloths when I have guests.	0.42646	3.33978	1.77799

Results

Analysis of Variance of Attitude Index Scores

Results of analysis of variance for the Concern for Social Status Awareness Index are shown in Table II. Significant differences were found by locality and race. The mean score of the Protestant community homemakers was 10.9612 and the mean score of Catholic community homemakers was 9.8001. The Black homemakers with a mean of 10.7856 scored higher than the Whites who had a mean of 9.9757. Although the race by age interaction means were not significantly different at the five percent level of probability, the ranking of scores is interesting and helps explain the race differences. The rank of scores are given in descending order: Blacks under 45, 10.9720; Blacks over 45, 10.5995; Whites over 45, 10.4295, and Whites under 45, 9.5219. The

TABLE II

ANALYSIS OF VARIANCE FOR CONCERN FOR SOCIAL STATUS INDEX SCORES FOR HOMEMAKERS IN TWO LOUISIANA COMMUNITIES

Source	DF	SS	F Value	Probable F
TOTAL	358	4120.9615		
Town	1	96.0303	8.6734	.0038
Race	1	42.2773	3.8153	.0485
Town x Race	1	5.0894	0.4597	.5054
Education	1	0.9349	0.0844	.7689
Income/Person	1	6.0696	0.5482	.5337
Age	1	4.9920	0.4509	.5096
Race x Age	1	30.9025	2.7911	.0916
ERROR	351	3886.2219		

major difference is among the young women with the Blacks being more concerned with social status than the Whites. This finding will be discussed later. No other significant differences were found by income, education or age. A quadratic analysis by income and education revealed a slight tendency toward greater concern for social status by the middle education and income groups, but not enough to be considered significant.

Foods Identified as High Status, Low Status and Unacceptable

The percentages of respondents who mentioned given food categories for the three questions related to status levels of food are presented in Tables III, IV and V. Significant X^2 values are given in tables in Appendix A.

Food categories which are listed as high status foods by 15 percent of any group in this study are given in the following outline as either one with no significant difference between groups or within the category that was significantly greater than the other groups in the analysis.

No Differences Between Groups	Miscellaneous Vegetables Salads Chicken Potatoes
Locality	
Protestant Community	Steak Sweets
Catholic Community	Beef Roast Rice Crayfish
Race	
Whites	Beef Roast
Blacks	Rice
Locality by Race	
Protestant Community Whites	Steak Sweets
Catholic Community Whites	Beef Roast Crayfish
Protestant Community Blacks	None

Catholic Community Blacks	Rice
Occupational Prestige	None

Items in only one food category (ground beef and weiners) were mentioned as low status foods by 15 percent of any group of respondents in this analysis. Analyses were done on the total number of responses to determine if any group or groups mentioned low status food items at a significantly greater rate than the other groups. The white homemakers in the Protestant community listed ground beef and weiners as low status foods more often than did the other three groups. The Protestant community homemakers listed significantly more items as low status than did the women from the Catholic community. No other differences were found between groups.

The third question concerning unacceptable foods had no category that 15 percent of the respondents of any group in the analysis mentioned. As for the second question, a total of all the responses were analyzed by the study groups. The Protestant community homemakers again had a significantly greater response rate of total items than did the homemakers from the Catholic community. No other differences were found.

Discussion

As can be seen from the preceding findings, high status foods were more readily identifiable than were lower status items. In our society, high status items are generally the rarest or most expensive items. It could, therefore, be expected that foods mentioned as high status foods would be similar to those thought of as expensive foods. Two of the high response status categories, steak and roast beef, were, in fact, two of the most often mentioned foods as responses to a question regarding expensive foods. However, chicken, potatoes and rice which received high response rates to a question concerned with inexpensive foods were also listed as high status foods. The high status accorded chicken may be due to a cultural lag from a time when chicken was a more scarce and expensive item. Rice and potatoes are often served with meat by those who can afford meat, but they may be used more extensively by those who cannot afford ample servings of meat.

TABLE IV

PERCENT OF HOMEMAKERS IN TWO LOUISIANA COMMUNITIES WHO LISTED CERTAIN FOOD ITEMS AS FOODS NOT GOOD ENOUGH TO SERVE GUESTS

Category	% of Total Sample	Category	% of Total Sample
Ground Beef and Weiners	8.6	Organ and Boney Meats	2.2
Beans	5.8	Greens	2.2
Cornbread and Cush-Cush	4.7	Sandwiches	1.9
Miscellaneous Meat	3.6	Miscellaneous Vegetables	1.7
Fish	3.3	Chicken	1.7
Soups	2.8	Miscellaneous	5.8
TOTAL (N =160)			

TABLE V

PERCENT OF HOMEMAKERS IN TWO LOUISIANA COMMUNITIES WHO LISTED CERTAIN FOOD ITEMS AS UNACCEPTABLE

Category	% of Total Sample	Category	% of Total Sample
Cheap Cuts & Organ Meats	8.9	Miscellaneous Vegetables	3.3
Wild Foods	6.3	Pork	2.5
TOTAL (N = 107)		Miscellaneous	8.0

The Protestant community respondents mentioned steak as a high status food more often than did the Catholic community respondents and the homemakers in the French Catholic sample listed beef roast more often than did the other respondents. This difference was found to be associated with other ideas concerning food. The Catholic community homemakers consistently listed foods that require greater preparation time than did the Protestant community homemakers. This pattern is probably due to the Catholic image of the role of the wife and mother. That is, she is expected to devote herself more fully to satisfying the needs of her family than is the Protestant homemaker.

The respondents in the Protestant community sample listed more items as low status and unacceptable food items than did the French Catholic community respondents. This finding, which suggests that the Protestant community respondents were more concerned with status difference than were the Catholic community respondents was consistent with the differences found between these two groups on the Concern for Social Status Index.

Findings from both segments of the study support the concept of the Protestant ethic if the Concern for Social Status Attitude Index is related to the over-all value systems of Achievement-Success and External Conformity as mentioned in the introduction. According to Williams (1970, p. 486) external conformity is to be expected in a society which prizes upward mobility and consumption patterns are increasingly becoming a mark of achievement. Shared standards of achievement therefore, are to be expected more in a Protestant locality than in a predominantly Catholic locality. Interestingly, the homemakers in the Protestant community reported less money spent for groceries and more income than did the Catholic community homemakers. This finding suggests that concern for status does not necessarily mean more money is spent on food on a day-to-day basis. It does support the idea that greater differences exist between what is served family and guests in the Protestant community than in the Catholic community.

The finding that the young Black women scored highest on the Concern for Social Status Awareness Index can also be supported by Williams' ideas on societal value systems. He has written, (Williams, 1970, p. 486)

> The competitive striving of an upward mobile group in a society organized around the economic enterprise requires stringent discipline...over patterns of

> consumption, over the uses of time and resources. In this aspect, conformity is derivative from equality of opportunity in conjunction with success striving.

The young Black women are probably the group who have the greatest perceived opportunity for social status advancement. The young Whites who scored lowest on this index are probably the most secure group with their status attainment. Not only did Blacks score higher than the Whites on the Concern for Social Status Awareness Index, but they also scored higher on a frugality index. This finding again suggests that food which is a less conspicuous consumption item than other goods, such as clothing, may not be considered as important a status item in the budget as certain other items. In other words, the concern for status is present, but in actual practice other consumption items are more relevant than food.

In conclusion, the findings from this study indicate that differences in concern for social status as expressed in food habits and attitudes vary more by subcultural factors of locality, race and religion than by the variables of age, education and income.

REFERENCE

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APPENDIX

TABLE I

DIFFERENCES BY LOCALITY IN FOOD CATEGORIES RESPONDENTS CONSIDER AS HIGH STATUS FOODS

Food Category	Mansfield ON/EN[1]	Breaux Bridge ON/EN[1]	Total N	X^2 Value
Steak	67/45.1	25/46.9	92	20.86***
Roast	28/39.7	53/41.3	81	6.76**
Rice	10/29.9	51/31.1	61	25.97**
Sweets	42/22.5	4/23.5	46	33.08***
Crayfish	2/19.6	38/20.4	40	30.99***

[1] Observed N/Expected N

$^{**}p<.01$, $^{***}p<.001$ on two-tailed X^2 test.

TABLE II

DIFFERENCES BY RACE IN FOOD CATEGORIES RESPONDENTS CONSIDER AS HIGH STATUS FOODS

Food Category	White ON/EN[1]	Black ON/EN[1]	Total N	X^2 Value
Beef Roast	62/53.5	19/27.5	81	3.98*
Rice	32/40.3	29/20.7	61	5.04*

[1] Observed N/Expected N

$^{*}p<.05$ on two-tailed X^2 test.

TABLE III

DIFFERENCES BY TOWN AND RACE IN FOOD CATEGORIES RESPONDENTS CONSIDER AS HIGH STATUS FOODS

	Mansfield		Breaux Bridge			
Food Category	White ON/EN[1]	Black ON/EN[1]	White ON/EN[1]	Black ON/EN[1]	Total N	X^2 Value
Steak	50/27.6	17/17.5	17/33.1	8/13.8	92	28.46***
Roast	22/24.3	6/16.9	40/29.2	13/12.15	81	9.75*
Rice	6/18.3	4/11.6	26/22.0	25/ 9.15	61	41.39***
Sweets	26/13.8	16/ 8.7	4/16.6	0/ 6.9	46	33.37***
Crayfish	2/12.0	0/ 7.6	33/14.4	5/ 6.0	40	40.13**

[1] Observed N/Expected N

*p<.05, **p<.01, ***p<.001 on two-tailed X^2 test.

TABLE IV

DIFFERENCES BY LOCALITY IN TOTAL RESPONSES OF FOOD CATEGORIES RESPONDENTS CONSIDER AS LOW STATUS FOODS

Food Category	Mansfield ON/EN[1]	Breaux Bridge ON/EN[1]	Total N	X^2 Value
Total Responses	101/78.4	59/81.6	160	12.769**

[1] Observed N/Expected N

**p<.01 on two-tailed X^2 test.

TABLE V

DIFFERENCES BY LOCALITY AND RACE IN FOOD CATEGORIES RESPONDENTS CONSIDER AS LOW STATUS FOODS

Food Category	Mansfield White ON/EN[1]	Mansfield Black ON/EN[1]	Breaux Bridge White ON/EN[1]	Breaux Bridge Black ON/EN[1]	Total N	X^2 Value
Ground Beef & Weiners	19/ 9.3	0/ 5.9	9/11.2	3/46.5	31	19.9655***
Total Responses	64/48.0	37/30.4	39/57.6	20/24.0	160	13.44**

[1] Observed N/Expected N

**p<.01, ***p<.001 on two-tailed X^2 test.

TABLE VI

DIFFERENCES BY LOCALITY IN FOOD CATEGORIES RESPONDENTS CONSIDER UNACCEPTABLE

Food Category	Mansfield ON/EN[1]	Breaux Bridge ON/EN[1]	Total N	X^2 Value
Total Responses	72/52.4	35/54.6	107	14.36***

[1] Observed N/Expected N

***p<.001 on two-tailed X^2 test.

A CRITICAL EXAMINATION OF SELECTED MYTHS OF POVERTY

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Introduction

Although the so-called "War on Poverty" is approaching a decade of age, the number of poor Americans in a nation as wealthy as the United States, by world standards, is still staggering. According to the U. S. Bureau of the Census, in 1970 about one out of eight Americans could be classified as poor.* Yet, during the decade of the 1960's significant progress was made in reducing the magnitude of poverty in America (Current Population Reports, P-60, 81).

Roland L. Warren (1972:342) notes that poverty has emerged as a problem of great national salience, not because there is more of it than before, but because of a new awareness of its existence in a land of wealth, both on the part of the poor and by the more affluent of our society.

Due to a revolution of rising expectations, the disadvantaged no longer simply accept their deprivation as a lot cast upon them by unchangeable conditions. Instead the poor identify greed, special privilege, and defective social organization as the main causes of their frustration and misery. Furthermore, the poor are beginning to take the offensive against traditional political and economic institutions, and they are demanding something more than a welfare state. As Haskel Miller (1971:106-7) expresses it, "with increasing clarity, people across the world cry out for a service state -- a set of political arrangements dedicated to assisting in the organization of all people for the welfare of all."

Patronizing paternalism is never satisfactory to the poor, for they seek self respect as well as bread. In America they poignantly express a deep dissatisfaction with the quality of community relations. The revolution of the American poor is a manifestation of a serious crisis in the social organizations of our society -- a society which continues to be heavily criticized for moving too slowly to alleviate the problems of poverty. It is the contention of this paper that the lethargy in reducing poverty in the U. S. is due mainly to the continued widespread prevalence of myths about the poor which are firmly entrenched in the minds of the ruling, non-poor, white majority.

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*The Census Bureau uses the poverty index adopted by a Federal interagency Committee in 1969. The index provides a range of thresholds adjusted for factors such as family size, sex and age of head, farm or non-farm residence, and changes in the Consumer Price Index. The weighted average threshold for a nonfarm family of 4 was $2,973 in 1959, $3,743 in 1969, and $3,968 in 1970.

The Prevalence of Myths

Before proceeding into a discussion of some of the myths of poverty, it is appropriate to reflect on the meaning of the term myth, particularly as applied in the context of this paper. Due to the nature of the ensuing discussion, it seems wise to present two representative definitions of the term myth. First, Webster's Collegiate Dictionary provides a useful interpretation of the colloquial concept: a myth is an "ill-founded belief held uncritically, especially by an interested group." This paper will frequently and informally refer to a myth of poverty as a misconception held by some reference group, usually "the public" or "the white majority."

Commensurate with the purpose of this investigation, a more historical and sociological understanding of the nature of a myth is essential. William R. Burch, Jr. (1971:56-7) provides a deeper insight with his definition: "Myths are collective representations which tell us about the kind of people we wish to be and why we should be that kind of people." In this sense, myths help account for our regular ways of acting, for the nature of our institutions, and for the methodology we adopt to solve problems. As Bronislaw Mallinowski's field work (reported by Burch) points out, myths are usually constructed from perceptions of past events, though they tend to structure present events. They deal with significant and recurring cycles and tend to reinforce existing social divisions.

White society views poverty and the people it encompasses from the framework of a deeply ingrained set of values and norms. In many cases these values have been expressed as hostile attitudes toward the impoverished. For example, there is hostility toward "those who do not work for what they get" and even toward those who simply have less than the more affluent majority. Thus the ruling white majority, even when extending an arm of help to the needy, does so with a condescending attitude that demands submission and appreciation. The group pride and idolatry of the affluent is sufficiently warped to perpetuate blatant misuse of out-groups such as the poor (Miller:110-11). These hostile attitudes are tenacious and pervasive with deep historical and emotional roots. They are outgrowths of various myths which have separated the in-group affluent from the out-group poor. At the same time, these antagonistic attitudes generate and perpetuate myths about the poor, using the dictionary definition of myth. One might conclude, then, that myths, as collective representations of values, generate other "applied" myths as misconceptions which cloud people's thinking about welfare and poverty to the point of becoming barriers to change.

Primitivism in one form or another has been cited as the source of hostile attitudes toward the poor. Consider, for example, the prevailing attitude of our society toward deviants and the emphasis on punishment rather than rehabilitation of deviant individuals. To a great extent affluent white society still considers the poor, particularly the Negro poor with their characteristic larger families, as deviants. Failure is always pinned on the individual, thus largely ignoring the need for basic changes in the social order to prevent the deviance of poverty.

Racism and ethnocentrism are two major roadblocks to the elimination of poverty, and they too have their basis in myths. The racist typically draws unjustified conclusions from meager or isolated facts. He projects differences in individual cases to the extent of categorizing large groups, and he sees these differences as unchangeable. Closely aligned to the racist, the ethnocentrist relies on narrow group pride, a feeling of superiority, and perhaps a belief in a "master race" as grounds for resisting the social changes which could help obliterate poverty (Miller:110-11).

When these attitudes of hostility infiltrate the occupants of the power structure of a democracy, there are certain to be serious defects in the democratic model. An overemphasis on individualism to the neglect of social responsibility leads to inequalities and social alienation. Thus, in America today, we have large numbers trapped in poverty while giant corporations flourish. Thus we have a government largely controlled by pressure groups seeking to maximize their own selfish interests. Government's societal role is expanding, but largely in a piecemeal and unplanned fashion, and the poor are still very much with us.

Interestingly enough, religion has had a powerful influence in perpetuating myths about the poorer members of our society. Religion continues to employ symbolic communication to gain stability in a changing world. Burch (1971:8) focuses on the historical steadfastness of religion in this description: "Surrounded by all the urbane pomp and circumstance of a world capital, ministers of God still speak to their 'flocks' in descriptive terms appropriate to a threatened Mideastern confederation of herdsmen over 2000 years ago." The purpose here is not to indict religion as inimical to progress and social change. It simply is to provide a larger perspective for the nature of and reasons for the existence of myths of poverty. Religion is simply a definite contributing factor.

White Middle Class Attitudes

Many of the misconceptions about poverty and its people have grown and become entrenched in the public mind because until fairly recently little was known about the American poor -- who they were, where they were, and especially why they were poor. It was not until the middle 1960's that the first adequate census of the population on public assistance was compiled. Before that the poor could claim the dubious distinction of being the little understood and ignored persons of "The Other America" written about by Michael Harrington (Miller:110-11). Now, as we enter 1973, the poor have been thoroughly investigated, categorized, criticized, and often victimized by researchers and administrators of the War on Poverty.

Yet it seems that far too little progress has been made in understanding the basic causes and issues of poverty, and there has been even less success in communicating this understanding to the white middle class who ultimately shape public policy. The in-groups remain alienated from the out-groups. The crisis in community deepens, perhaps because people "simply are not concerned enough for one another to make provision for one another's needs" (Miller:107).

To help illustrate the extent to which myths of poverty are founded in ignorance and alienation, reference is made to a survey of 1400 middle class individuals in the St Louis metropolitan area in 1971. The persons were asked the open-ended question: "Why is there poverty in America?" Interestingly, a vast majority showed little concern or insight. Responses ranged from flip unconcern to a refusal to acknowledge any problems. When the respondents did reveal an awareness of poverty problems, many tended to lay the blame entirely on the poor themselves. Witness the attitude that "many opportunities are ignored by people who are receiving relief, simply because relief pay is easier to obtain than money offered by jobs."

Responses from the St. Louis study were categorized into 10 general categories as follows:

Why is There Poverty in America?
(responses not in order of frequency)

1. Lack of motivation
2. Lack of education
3. Fatalistic-environmental causes
4. Overpopulation
5. Problems with the welfare system
6. Problems in the occupational structure
7. Mismanagement of money
8. Discrimination
9. Inflation
10. Other

The results of the survey, reported by Robert H. Laurer (in *Urban and Social Change Review*, 1971:8-10) showed that 43% of the 1400 respondents cited lack of motivation on the part of the poor as the most common cause of poverty. Ranking second as a reason was lack of education, identified by 35% of the persons interviewed. 22% of the individuals gave reasons falling under the fatalistic-environmental heading -- a category which encompassed all those responses which reflected a sense of fatalism about poverty due to circumstances beyond the control of individuals. Many of the middle class whites felt that the poor were born with the attitude of being poor and were satisfied with their lot. Thus, they felt poverty should be accepted as an inevitable way of life. This attitude is typified by a 32 year-old businessman who said, "I don't actually know the cause of poverty, but it is here to stay and we must learn to live with it."

From the St. Louis survey and the discussion thus far, it is obvious that there are a multitude of related myths of poverty. This paper will not attempt to examine all of them; rather, it will focus on two of the most commonly held and damaging myths: (1) the idea that the mass of the poor are disreputable lazy-loafers, cheaters and generally persons with low motivation and initiative; (2) the attitude that the poor are immoral, excessively promiscuous, and encourage family instability and illegitimacy. After an investigation of these two basic misconceptions, the paper will conclude with suggested modifications in policies and programs which reflect a clearer understanding of poverty problems and are more effective in solving them.

The Myth of the Lazy-Loafer and the Welfare Cadillac

The belief that most of the poor are able-bodied but remain poor because they prefer to loaf and free-load off of the rest of society is a widespread one. The President's Commission on Income Maintenance investigated public assistance in 1967 and found this attitude prevalent all over the country (Miller:112). A corollary to the opinion that the poor are predominantly lazy-loafers is the myth of the autonomous man. This is the idea that any individual can with perseverance and diligence become a success in any social context. Therefore, the chief cause of poverty is seen as a lack of initiative and the unwillingness to work at one's level of capability. Countless Americans, especially those who have lived through the depths of the Great Depression, understandably cling to the belief that success is available to all Americans who are willing to achieve it by the dint of hard work. The poor remain poor simply because they haven't given it the good old college try. If they had suffered enough, then undoubtedly they would have the fortitude to go out and make something of themselves (Lauer:8-10).

What the myth of the autonomous man overlooks is the fact that the typical person in poverty has probably suffered a frantic, lifelong, but unsuccessful struggle to cope with the frustration of being poor. And still the affluent inhabitants of the world which often exploits him think he should be as able as anyone else. In Lauer's opinion, if this reflects "the thinking of a majority of Americans, the poverty problem is likely to remain with us for some time"(Lauer:8).

At this point it is only fair to point out that there is some truth behind every myth. Obviously, some of the poor, including a number of welfare recipients, are just downright lazy-loafers. There is no question of that; the question is: "how many? To what extent is this true?" The whole purpose of this paper is to examine the evidence supporting this belief and others. The hypothesis is that the case of the lazy-loafer has been exaggerated -- that when applied to the poor as a whole it is not only a myth but also a very damaging explanation of the existence of poverty. To support this contention, reference is made to the U. S. Census Report on "Characteristics of the Low-Income Population, 1970."

According to this census report, as of March, 1971 there were almost 3.3 million male heads of households below the poverty level. The civilian unemployment rate among all poor male heads at that time was 4.9%, although 1.3 million of these male heads were not considered to be in the civilian labor force. Of the 3.3 million male heads, 1.2 million of 36.5% did not work in 1970. Before jumping to the conclusion that all of these were lazy-loafers, one should examine their reasons for not working, as summarized below.

Status of Low-Income Male Heads Who Did Not Work in 1970

728,000 or 61% were 65 years old or more
310,000 or 26% were ill or disabled and less than 65 years old
28,000 or 2% were going to school
35,000 or 3% could not find work
1,101,000 or 92% had a legitimate reason for not working

Even if we count only those male heads who were aged, ill or disabled, we find that these made up 87% of the low-income male heads who didn't work in 1970. Among the remaining 13% there might definitely be a number of lazy bums, but then no mention has been made of the low level of education and skills characteristic of the poor or of the short supply of jobs for unskilled persons.

If we examine the work status of 1.9 million female heads of low-income families, we find that 1.1 million didn't work in 1970. However, those who didn't work because of family responsibilities, illness, or disability made up 91% of the total unemployment in 1970. All together, 62% of the male heads and 43% of the female heads below the poverty level worked some amount during 1970. The disconcerting and very tragic fact is the extent of the underemployment among the poor -- only 1.1 million poor families or about 1/5 of the total below the poverty threshold were headed by year-round full-time workers (Current Population Reports, P-60, 81).

Based on the preceeding statistical evidence, there is little foundation for the generalization that the poor are largely a mass of lazy-loafers. Perhaps there is not the same degree of secular ascerticism and functional activism among the poor as there was among the Pilgrims, but there is ample reason to believe that the lazy-loafer explanation for poverty is a myth. Yet this denigrating criticism of the poor persists, especially as applied to welfare recipients. So let us take a look at the "shiftlessness" of those on public assistance.

Following is a breakdown of the more than 13 million Americans receiving a combination of federal and state welfare assistance as of April, 1971 (Society 9, 1972:14-16).

Children	55.5%
Mothers	18.6%
Aged Persons	15.6%
Blind and Disabled	9.4%
Able-Bodied Fathers	.9%
	100.0%

As this data clearly shows, less than 1% of all those on welfare rolls in April, 1971 were able-bodies fathers. Consider further the fact that 80% of these 126,000 men wanted to work, with one-half of them acutally enrolled in work training. Obviously, there is little indication that the welfare lists are packed with able but indolent man.

The largest group of able-bodied working age adults on welfare consists of 2.5 million mothers, most of whom head a family where there is no able-bodied male adult present. Of these females receiving public assistance, 14% actually work and 7% are engaged in work training. If day care facilities for their children and job training for themselves were provided, another 35% of these mothers could work. An estimated 4 to 5% need extensive social rehabilitation to be employable. The remaining 40% of welfare mothers have little employment potential due to: (1) small children in the home, (2) physical or mental incapacity, (3) other insurmountable work barriers. Despite these handicaps, nearly 8 out of 10 welfare mothers said they would work if these barriers were overcome (Society 9:16).

The lazy-loafer explanation for poverty is clearly unsubstantiated by these facts. For a more realistic explanation of the prevalence of poverty in this country a statement by the President's Commission on Income Maintenance seems appropriate at this point.

> "Many Americans wonder why the poor do not escape from poverty. The answer to this question is clear to us: they usually cannot, because most are already doing as much as can reasonably be expected of them to change their conditions . . . The simple fact is that most of the poor remain poor because access to income through work is currently beyond their reach . . . Society must aid them or they will remain poor" (Miller:112).

There are several other interesting aspects of the white middle class mind-set which views the poor as an indolent lot. The myth of the "welfare Cadillac" might be an appropriate heading for these beliefs; in other words, "why work when you can live it up on welfare?"

Part of this mind-set is the mistaken notion that once a person is on welfare, he will remain on welfare for most of his life simply because he prefers this "easy" means of existence. The facts are that the average welfare family has been on the rolls only 23 months, and at any given time 2/3 of the welfare families will have been receiving assistance for less than 3 years. Only 7.3% have been on welfare more than 10 years, and most of this group have a permanent disability. Surveys have shown that most recipients of public aid don't enjoy being free-loaders. To the contrary, they feel that the welfare status is very degrading and desire to get off the lists as soon as they can support themselves. However, due to many frustrating problems, it takes the average family about 2 years to become self-supporting (Society 9:16).

Furthermore, the idea that recipients of public aid are lavish spenders is completely without factual foundation. True, there is some mismanagement of funds received, but hardly to the extent displayed by the middle class attitude that a man "buys a $200 suit because it looks nice. His kids are half-starved and half-naked, but he is making a good show of it" (Lauer:9).

In reality, welfare payments are generally so meager that there is hardly enough for necessities, much less any luxuries. Each state establishes its own "need standard" for determining eligibility and level of payment, but 38 states pay less than their own established standard. The average payment to a welfare family of 4 with no other income varies from a low of $60 per month in Mississippi to a high of $375 per month in Alaska. Compared to the 1971 federally established poverty level of $331 per month for a family of 4, welfare payments in all but 4 states were below this level. Furthermore, many of the working poor who are ineligible for public assistance earn less than their respective poverty threshold (Society 9:14).

In a 1967 study, the President's Commission on Income Maintenance found that the typical family of 4 with a monthly income of $284 ($3,408/yr.) spent all but $9 for basic necessities such as food, housing, public transportation, clothing, and personal care. Obviously, this left little funds for emergencies, medical care, insurance -- let alone such things as a decent family automobile, a bed for each person, and adequate school supplies. Given this scant income and the accompanying food budget of $1/day/person, it is no wonder that most of the poor do not have a nutritionally balanced diet. When one low-income witness before the Commission was asked how he made ends meet on such a budget, he replied: "They don't meet." (Miller:112-13).

Unfortunately for those of the poor who must resort to public welfare for their subsistence, there is a widespread attitude among the public and even among administrators within the "welfare establishment" that many of the recipients are "cheaters" -- persons who deliberately deceive officials by failing to report all of their income or by distorting the truth about their family situation and who therefore don't deserve to be on the rolls. However, the facts clearly reveal that welfare cheating is at most only a rare occurrence.

According to the U. S. Department of HEW, welfare fraud or misrepresentation is suspected in less than 4 out of every 1000 cases. Another 1 to 2% of the cases are later discovered to be technically ineligible due to misunderstanding of the rules, agency error, or tardiness in reporting income changes. State welfare agencies are required to check the eligibility of AFDC families at least once every 6 months and oftener in cases where unemployed fathers are in the family. In addition, HEW periodically checks state records and observes a sample of cases on site. Clearly, every effort is made to minimize cheating. Most of the errors discovered are found to be due to administrative miscues rather than deliberate fraud on the part of recipients (Society 9:14). In fact, as Jonathan Turner points out, social workers are so intent on discouraging cheating that they may often violate clients' constitutional rights. If this concern over cheating were reduced, then the size of the welfare bureaucracy could be substantially decreased (Turner, 1972:90-91).

There are some poor persons and some welfare recipients who are cheaters; there are some who display poor management of their money (a number of those having alcohol or drug habits to support); there are some who are just plain lazy. However, the facts brought to light in this section should conclusively show that none of the above can be generalized to apply to a majority of the poor. Furthermore, as long as the ruling white majority clings to the myth of the lazy-loafer and the welfare Cadillac, there can be little hope of eliminating poverty from this nation.

There are other serious misunderstandings of the people in poverty which hinder potential solutions to poverty problems, and it is to several of the more serious of these that we now direct our attention.

The Myth of the Immoral and Sexually Promiscuous Poor

As far as many of the middle class are concerned, the chief cause of poverty is overpopulation due to a lack of birth control on the part of the poor. It is felt that the poor, having nothing better to do, have developed an unbelievable interest in sex. Add to this the related beliefs that the poor have an inferior genetic endowment partly due to extensive inbreeding, that the family structures of the poor are unstable, that the poor and poverty programs actually encourage illegitimacy -- and you have the resulting middle class image of the poor as a throughly immoral and disreputable lot.

First let us examine the theory of overpopulation as causal of poverty. Exemplifying the common middle class approach is this explanation by a 44 year old repairman from the St. Louis survey: "The main problem is family planning. The poor should have smaller families. You just can't raise a large family on a small income. It's not the economics of the country; anyone who can read and write can work." Then there is the 42 year old salesman who contends: "The poverty in this country is the direct result of promiscuous sexual activity. Persons with already meager incomes beget children far in excess of their financial ability to support them. The AFDC program fosters this activity and helps society to get further mired into poverty." (Lauer:9).

While the poor in general are greatly defamed for their promiscuity, the Negro poor suffer even greater castigation. The white middle class often picture the Negro male as a hedonistic and violent "stud" with a willing and promiscuous girl friend. In the opinion of James Baldwin, renowned Negro author, this image is created by the sexual inhibitions of the "respectable" white society. It has its origins in slavery and nineteenth century American fantasies about the sexual potency of all "dark" European immigrants. Apparently these fantasies still prevail, helping Claude Brown's Manchild in the Promise Land to be a best seller (Gans, 1968:318-19).

This hyperbolic image of the Negro is essentially a reflection of a white problem. The educated white middle class may not live in sexual anarchy, but they sometimes wish they did, so that such mythological tales make enjoyable reading. Both Claude Brown and Arthur Dunmeyer have pointed out that the way of life of the Negro poor is hardly one of endless pleasure and easy decisions (Gans:319). When faced with daily segregation, inequality, poverty, and the horrors of slum life, it is only natural for blacks to look for an escape route. If educational channels become closed, then blacks may turn to drugs and sex as panaceas.

On the side of the black man, Ralph Ellison has contended that centuries of adversity have made the Negro a stronger personality than the average white who doesn't have to cope with insecurity, inequality and injustice. He also points out that there is no one Negro and any attempt to create a single image of the Negro is just a white fantasy (Gans:319). Fantasies of some sort are a natural product of alienation, but when these fantasies are about real people they all too often become social and political realities reflected in the voting booth and government policies.

A look at the U. S. census data confirms the hypothesis that the poor have larger families than the non-poor and that the Negro poor have still larger families. However, the differences are not as significant as many would believe. The average family size was 3.9 persons for low-income families in 1970 (3.6 for poor white families and 4.7 for poor Negro families), compared to a mean size of 3.6 persons for those families above the poverty level; 14% of all poor families and 7 or more persons compared to only 5% for the nonpoor families. About 1 out of 10 poor white families consisted of 7 or more persons while about 2 of 10 Negro families were of this size (Current Population Reports, P-60, 81).

For a look at the number of related children under 18 years in the household, comparing low-income families to families of all income levels, reference is made to Table 1 below. From this table, we see that the mean number of related children under 18 per family with such children is 3.03 for families below low-income levels, compared to 2.33 for families of all income levels with related children under 18 years. For whites, the figures are 2.80 and 2.25 for poor families and all families, respectively. For Negroes, the statistics show mean number of related children under 18 as 3.44 and 2.88 in a similar comparison. This table also shows the number of families with a given number of children expressed as a percentage of all families with related children under 18 years for that particular category.

Table 1. Percent of families with a given number of related children under 18 years and mean number of such children per family, for indicated categories*

Number of Related Children Under 18 Years	All Races		White		Negro	
	All Incomes	Poor	All Incomes	Poor	All Incomes	Poor
	(Percentages may not total 100% due to rounding errors)					
3 or less	82.8%	66.9%	84.3%	70.6%	71.1%	59.5%
4 or more	17.3%	33.1%	15.7%	29.3%	29.0%	40.6%
6 or more	3.8%	10.8%	2.8%	8.2%	10.3%	16.0%
Mean number	2.33	3.03	2.25	2.80	2.88	3.44

* In each category, the universe includes only those families which have related children under 18 years.

As these figures show, 17% of all families which have related children under 18 years have 4 or more of these children, while the percentage for poverty families is almost twice as great (33%) -- nearly one third of all poverty families who have related children under 18 have 4 or more children in the family. A higher percentage of Negro families seem to have larger families, poor or not; about 4 out of 10 low-income Negro families with children under 18 have 4 or more of these children. The data also confirm the fact that the incidence of very large families with 6 or more children under 18 is higher among the poor than among all families with such children.

Clearly there is a correlation between family size and poverty; however, the census data are not sufficient evidence to claim a causal relationship. If we consider the case of a typical low income family as compared to a typical family above poverty level, the poor family is likely to have 1 more related child under 18 than is the non-poor family, no matter what race is involved. This is hardly grounds enough to declare that overpopulation is the cause of poverty. The mean income in 1970 of all poor families with related children under 18 years was $2,586 or $536 per family member. Compared to the poverty threshold, this means that the mean income deficit for such a family was $1,680 or $348 per family member (Current Population Reports, P-60, 81). Even if the average family size of poor families were reduced to the average for non-poor families, the income deficit would still be sizable. The basic problem is not simply having to divide up a meager income among too many persons -- the real problem is the size of the income in the first place.

Families on welfare have been especially criticized for having too many children. Many even feel that welfare mothers deliberately conceive additional children just so they can increase the size of their checks. The facts are that the typical welfare family consists of a mother and three children; 64% of the welfare families have 3 children or less, and the birth rate for welfare families has been dropping steadily since 1967. As for having additional children in order to gain more funds, the exiguousness of welfare payments hardly makes this worthwhile. The average payment for another child is only $35 per month, hardly enough to cover the cost of caring for another baby. Also, some states have a maximum payment in the AFDC category with no increase after the third or fourth child. Further refuting this theory is the fact that 90% of the children in welfare families are 2 years or older. Since the average family has been receiving assistance for less than 2 years, most of the offspring must have been conceived before applying for welfare (Society 9:14).

Conceding the fact that the poor characteristically have larger families, it is only fair to ask why this might be the case. Certainly the population explosion is more real to low-income families than to the "planned-parenthood suburbanites" because of the cramped space in which most of the poor live. Yet, blaming poverty on overpopulation is a very useful distraction from the more painful task of identifying fundamental responsibilities and suggesting radical reconstruction of dominant institutions. Burch feels that the population theories of Ricardo and Malthus were means for rationalizing the exploitation of man and nature by a market economy. He goes on to say that population explosions are rooted in hopelessness and that the responsibility for the hopelessness lies primarily with the dominant Western economic centers rather than reflecting some immoral irresponsibility among the underclass (Burch:22-4).

Early marriage among the poor is not as likely due to a desire for reproduction as it is a reflection of the desire for higher living standards, security, and other socially directed needs. Judith Blake found that the U. S. poor have been aware of birth control for at least 30 years. They continue to have larger families than the affluent mainly because they desire them. Offspring give status to poor parents, providing about the only means possible for displaying conspicuous consumption. Furthermore, with the revolution of rising expectations, the poor are beginning to recognize that they have power only in numbers (Burch: 26-7).

Encouraging family planning and birth control is a legitimate and helpful part of the War on Poverty. However, policy makers must not become bogged down in the myth that poverty is due mainly to overpopulation. Attention should be directed at the pressures which cause the poor to resort to over-production of children rather than merely trying to impose pressures on the poor not to reproduce.

Closely related to the myth of overpopulation as causal of poverty is the idea that family instability perpetuates poverty, particularly among the urban Negro poor. The renowned, multi-disciplinary scholar Lewis Mumford (1969:251-52) feels that marital promiscuity and parental irresponsibility have undermined the family as the basic unit of a stable society. He estimates that one-half of the children in Negro metropolitan communities cannot identify their fathers -- a phenomenon which deprives many Negro youngsters of male supervision and example and undermines their own sense of personal loyalty and identity. Mumford continues, accusing welfare legislation of encouraging husbandless mothers to be sexually irresponsible and idle. Thus their children grow up with the vocational aspiration of wanting to "draw."

Daniel Patrick Moyniham has identified three principal weaknesses of the ghetto Negro family: (1) instability (2) a proclivity for producing illegitimate children (3) and a predominantely matriarchal family structure. He estimated that nearly one-fourth of all Negro women are divorced or separated. 35% of all Negro children live in broken homes; nearly one-fourth of all Negro births are illegitimate; and nearly one quarter of Negro families are headed by a woman. The result is that nearly 14% of all Negro children are supported by the AFDC program (Gans:308).

These findings are significant, although the figures probably indicate better situations than most middle class whites visualize. An examination of the census data confirms the correlation between family instability and poverty -- both for the poor as a whole and for the Negro poor. Families with a female head represented 37% of all low-income families in 1970, an increase from 23% in 1959. This proportionate change was due mainly to a decrease of 3.1 million families below the poverty level headed by men, while the number of poor families with female heads remained about the same over the 11 year period. The number of persons in low-income households with female heads actually increased about 740,000 from 1969 to 1970, while there was no significant change in families with male heads. In 1970,46% of all poor children under 18 years were members of families with female heads compared to 24% in 1959 (Current Population Reports, P-60, 81).

Although many critics of the poor might like to assume that these female heads, through promiscuous sexual activities, are continually bringing more children into poverty, census data for 1970 clearly show that there is no positive correlation between families headed by women and a higher mean number of related children under 18 years. To the contrary, it is the poor families with male heads that have the highest mean numbers of related children under 18 years -- this being true for both whites and Negroes. It seems that while there may be a high percentage of poor families headed by women, this phenomenon is not associated with an increase in the number of children (Current Population Reports, P-60-81).

Further evidence supporting the marital instability of poverty families is provided in Appendix Table 1. This table summarizes the changes in the number of poor families between 1959 and 1969 by sex and race of family head and place of residence. The data indicate significant progress in reducing poverty during the decade, but also show that the incidence of poverty is becoming relatively greater among families with female heads. Only in non-metropolitan areas, with respect to whites and for all races together, has there been a decrease in the number of families below the poverty level headed by females over the 10 year period. In all other categories, the number of poor families with female heads actually increased. Also, the percentage of poor families with a female head was significantly higher for Negroes than for whites in both metropolitan and nonmetropolitan areas (Current Population Reports, P-23, 37).

There obviously is a significant relationship between poverty and family instability. However, the census data showing changes between 1959 and 1969 suggest that it is more likely that the conditions of poverty cause the instability rather than vice versa. H. J. Gans has conjectured that family instability among the poor may not be pathological, particularly among the Negro poor where discrimination is still a very real problem. Even when there is a man present, it is often the Negro female who is the real head of the family. This is not just a case of extreme "henpeckedness"; the Negro man is often a marginal appendage because he cannot find regular work to support his family. The typical low-income Negro woman can frequently find some sort of employment (often domestic service work) easier than can the man, and if the woman head can't locate work she usually can obtain welfare to support herself and the children (Gans:309-11).

The fundamental causes of family instability among the Negro poor, according to Gans, are slavery and unemployment. Slavery was a necessary but not a sufficient reason. It placed the male in a inferior position, and the continued presence of inequality and discrimination has kept him there. Whenever there is work for women and serious unemployment among men for extended periods, families do tend to break up. Gans also contends that a family headed by a capable but unmarried, divorced, or separated mother may be healthier than a two-parent family where the male is a marginal appendage. Thus, the matriarchal family may be a viable solution to the circumstances of poverty. So long as the men are economically handicapped, this structure gives stability (Gans:309-13).

Census data indicate that Negro women have made relatively greater progress than Negro men in achieving parity of income with their white counterparts. In 1969, the median income of employed Negro females was

82.5% of employed white females in metropolitan areas. (However, it was only 48.2% of white female income in nonmetropolitan areas.) Contrasted to this relative equality was the fact that the median income of employed Negro males was only about 69% of their white counterparts in metropolitan areas (and 52% in nonmetropolitan areas). (Current Population Reports, P-23, 37).

The poor have been heavily criticized for encouraging illegitimacy. Furthermore, many argue that welfare programs, as presently structured, enhance this problem. There may be some truth to these allegations, and this author certainly does not intend to try to defend the present welfare system with its many blatant failures. However, ineptness in the welfare establishment is no excuse for writing off the poor as thoroughly immoral and "culturally deprived." Gans points out that illegitimacy is not punished in the lower class, and these children are as welcome as the legitimate ones. Therefore, illegitimate children don't necessarily suffer the pathological consequences that go with illegitimacy in the middle class. Lee Rainwater has suggested that illegitimacy and child-bearing have an entirely different meaning among the lower class. As mentioned earlier, children are an important status symbol (Gans:313).

Rainwater says Negro girls may invite pregnancy in order to gain adult status and to make sure they will have a family where they can play a dominant role, as their culture has trained them. Many poor Negro women continue to have children essentially because they want them. Children give them pleasure and fulfillment just as sexual promiscuity may give Negro men status and a feeling of masculinity. It seems, then, that the lower class must be provided with alternative hopes and rewards before trying to impose middle class standards or programs (Gans:313).

This section has shown that there is some evidence for correlating overpopulation, promiscuity, family instability, and illegitimacy with poverty. However, attempts to advance these related phenomena as causal of poverty clearly are without adequate foundation. Instability and illegitimacy may grate on middle-class white moralities, but they also must be recognized as viable adaptions to the circumstances of poverty. It is suggested that the basic causes of poverty are more socio-economic than cultural in nature. To that end, we will now take a brief look at some policy recommendations which hopefully would be more successful in eliminating poverty from this country.

Winning the War on Poverty

Citing the great progress America has made in all areas and especially in reducing the magnitude of poverty, many now feel that poverty is no longer a major problem in our society. However, Lee Rainwater, (Society 9, 1972:18-27) predicts that poverty problems will be with us for a long time to come if present trends continue. Based on patterns from 1947 to 1971, Rainwater projects no major changes in income distribution among families in 1985. While the top of the underclass is expected to have incomes of $8,200 per family (purchasing power equal to 1970 dollars) by then, it is expected that about 20% of the families will still have incomes less than one-half of the median family income predicted to be $14,700 in 1985).

Although the poor will continue to have higher incomes in absolute dollars, Rainwater thinks the income disparity between the poor and the average American will only widen if present policies are continued. She also thinks that there will be little progress in closing the gab between incomes of blacks and whites, so long as high unemployment holds back improvements. Despite the fact that 2.5 million blacks escaped from the bottom ranks of poverty in the decade of the sixties, with employment of black professional and technical workers increasing 131%, (Barbour, 1972) Harold Guthrie projects that only a sustained unemployment rate among blacks of less than 3½% will bring them to income equality with Whites by 1985. At current unemployment rates it will take about 100 years to achieve parity (Rainwater in Society 9, 1972: 18-27).

Rainwater believes the black underclass will continue to grow in numbers in urban areas unless marked improvements are made in their economic situation. If membership in society is the key issue to finding a meaningful life, and if in our affluent, industrial society membership can be achieved only through command over goods and services, then it seems that we will continue to have poor and oppressed minorities so long as a significant portion of Americans have incomes far removed from the average man.

This paper has sought to dispel the idea that poverty, and especially the poverty of Negroes, is largely due to cultural deprivation of the poor. Nevertheless, it should be pointed out that a heated policy debate continues over whether the underclass status of poor Negroes is an outgrowth of socio-economic or cultural factors. The socio-eocnomic or "situational" advocates, viewing black deprivation primarily as a result of lack of demand for unskilled workers and opposition to racial integration, recommed that poverty programs should create new jobs and income for the poor and attack segregation in all aspects of life. On the other side, the cultural proponents claim that social and psychological inadequacies of the Negro poor are a result of generations of poverty, and that these deficiencies prevent participation in a post-industrial American economy and society. They recommend programs to acculturate or enculturate the Negro poor, warning that the best economic and social policies will fail.

The view of this author throughout this analysis has been that the cultural deprivation explanation for poverty has some merit in individual cases, but that the facts do not support theories that cultural inadequacies are primarily responsible for the perpetuation of poverty. Burch (1971: 19-20) is very wise in declaring that an overemphasis on sociocultural explanations of human behavior may have its own kind of delusion. There is a real need for programs aimed at correcting certain cultural deficiences of the poor which prevent their functioning in our fast-paced society. However, attempts to convert all of the poor to a white middle class culture will only create hostility and further alienation among those who rightfully prefer to maintain their own cultural heritage.

We have seen that unemployment and underemployment of the poor, particularly the Negro poor, tend to create family instability. Mumford

(1968:251-2) notes this relationship and states that "no adequate urban renewal program will be possible until the restoration of the basic family constellation is taken as one of the essential goals." While this statement implies a sociocultural approach, Mumford does proceed to say that we should move to reward marital stability and parental prudence with year-round employment plus family wages to the fathers of families with bonuses that cease after the third child. Full parental responsibility among the poor can be best achieved with their active cooperation, and this cooperation can only be gained if both parents are able to assume their respective status-positions in a confident and complete manner.

Gans (1968:314-5) feels that since the basic causes of weak family structure are socio-economic, programs to encourage family stability must deal with the causes -- in the areas of employment, income, and provision of basic services. He maintains that if family income is sufficient to guarantee a decent living, if the Negro poor are freed from the material and emotional punishment of racial discrimination and allowed to participate as first-class citizens in the political community, then a healthy family structure which may or may not coincide with middle class ideals will develop as a result.

Continuing and expanding efforts to eliminate racial discrimination is a most important part of future efforts to fight poverty. Claude Brown states that the only path to a more dignified way of life for the Negro poor is equality -- of opportunity and achievement -- freedom for blacks to have the same choices as affluent whites in jobs, education, housing, and other basic services (Gans:318-19). Bradley Schiller (American Journal of Sociology 76, 1970:426-37) further supports the need for the elimination of class and racial bias in his discussion of the determinants of socio-economic achievement. He identifies three separate phenomena as combining to influence the achievement of individuals: (1) the opportunity structure (2) the characteristics of the individual himself (3) and a frictional factor which includes variables of chance. Measuring patterns of socio-economic achievement of poor children, Schiller concludes that inequality of opportunity along class lines is mainly responsible for their achievement lag. He also found significant evidence of racial bias hindering the development of sons of mothers under the AFDC program. In the final analysis, the elimination of discrimination requires the elimination of poverty, because middle class whites just won't accept the poor, whatever their race, as equals until they achieve economic parity. The evils of poverty and prejudice are inextricably linked, and efforts to solve these problems must go hand in hand.

The structure and programs of our present welfare system are currently the objects of much scrutiny and criticism, as they well ought to be. As presently constituted, our welfare system is humiliating, degrading and demoralizing. AFDC programs may or may not cause family instability, but they certainly do not encourage poor parents to assume the full nature of family responsibilities. Programs are needed which encourage and reward a stable two-parent family. Furthermore, state departments of social services are presently more concerned with minimizing costs than providing for human needs. As previously pointed out, many states pay considerably less than the established standard of need. Major changes in the welfare bureaucracy are necessary, and toward that end Haskell Miller's recommendations for improving our welfare system are most appropriate.

1. Centralize control of welfare programs and equalize provisions for all recipients.
2. Make welfare grants realistic and tie them to a cost of living index.
3. Simplify welfare eligibility standards and procedures.
4. Define welfare rights positively as human rights and rights of citizenship.
5. Remove the requirements aimed at imposing moral sanctions and other punitive disciplines.
6. Develop a comprehensive program of health and medical care.
7. Expand the social security program to cover all citizens and provide benefits for disablement at any age.
8. Incorporate work incentives into the program by allowing welfare recipients to keep their grants and a significant portion of their additional earnings.
9. Assure full employment by making the federal government an employer of last resort.
10. Provide every citizen, regardless of merit, with a guaranteed basic income of reasonable adequacy (Miller: 109-10).

The problems of poverty plaque many communities, but we must recognize in our policy formulation that American society is more than an aggregate of local communities. It has system properties of its own which must be confronted at the national level. Programs to cope with poverty should effectively combine institutions and organizations at federal, state, and local levels. Roland Warren (1972:357-60) declares that we must have national programs which address problems at the local level. In a very broad way, he suggests that federal programs should help local communities.

1. Toward comprehensiveness -- a larger context for problems which considers as many known ramifications as possible is needed. One-shot efforts in fragmented fields will not be adequate. Programs must be interdisciplinary and coordinated.

2. Toward local control -- through administrative decentralization funds should be allocated at local levels without cumbersome and costly procedures of close review. Policies should encourage self-determination, initiative, and local formulation of programs.

3. Toward rationality -- programs should apply rational planning methods and make use of social science findings. There is a need for combining systems analysis, welfare economics, benefit-cost analysis, planned budgeting techniques and other means of dealing with complex interrelated problems.

4. Toward citizen participation -- through active involvement of local citizens, programs gain acceptance. Citizen participation improves deficient attitudes, giving hope, reducing alienation,

> building confidence and civil spirit. Citizen involvement is a very effective means of redistributing the power of decision-making.

Although Warren's recommendations are very general, they provide a very helpful framework for re-structuring and organizing poverty programs. As he points out, "much poverty is inherent in the structure and operation of the American institutional order and not attributable to deficiency of individuals who are victimized by this structure.

Conclusions

In summary, discussion in this paper indicates that the typical white middle class view of the poor as a disreputable and culpable group is largely based on fantasy. However, as long as poverty is seen as a problem of the poor rather than of how society views and treats the poor, then there is not likely to be a very realistic or successful attack upon the problem. Lauer expresses it this way: "In other words, the problem of poverty is America is not simply a problem of poor people, but a problem of the total society and, in particular, the society's perception of its poverty stricken people." (Urban and Social Change Review 5, 1971:8).

It is quite clear that the elimination of poverty in America is now within the financial means of this nation. Based on census data indicating an average income deficit for all poor families of $1,420 in 1970, it would require 11.4 billion dollars to raise the incomes of all poor families and unrelated individuals below the poverty level to incomes above their poverty threshold. This is comparable to about 13% of our annual national defense budget. It remains to be seen whether we have sufficient concern to effect the necessary redistribution of wealth. There needs to be a major shift in the way Americans think about and cope with the problems of poverty, race, and social class. Those who hold the keys to power (in this case, the middle class white majority) must divest themselves of a number of fantasies. Only when the myths of poverty are clearly seen as myths, will we really begin to win the War on Poverty.

Appendix Table 1. Distribution and Percent Change of Families Below Poverty Level in 1969 and 1959 by Sex and Race of Head and Place of Residence: 1970 and 1960

	Numerical Distribution (1000's)		Percent Change Between 1959 and 1969		
Race and Residence	1969	1959	Total	Male Head	Female Head
ALL RACES					
United States	4,948	7,974	-37.9	-51.0	15.7
Metropolitan Areas	2,415	3,342	-27.7	-47.4	29.2
Inside Central Cities	1,484	2,013	-26.3	-47.8	26.2
Outside Central Cities	931	1,329	-29.9	-47.0	35.1
Nonmetropolitan Areas	2,533	4,632	-45.3	-53.2	-0.7
WHITE					
United States	3,553	6,027	-41.0	-50.6	7.6
Metropolitan Areas	1,650	2,369	-30.4	-44.9	20.8
Inside Central Cities	872	1,265	-31.1	-44.4	11.2
Outside Central Cities	778	1,104	-29.5	-45.5	33.8
Nonmetropolitan Areas	1,903	3,658	-48.0	-53.9	-7.3
NEGRO					
United States	1,326	1,860	-28.7	-53.5	30.3
Metropolitan Areas	720	940	-23.4	-57.7	40.0
Inside Central Cities	582	729	-20.2	-57.4	40.3
Outside Central Cities	138	211	-34.6	-58.5	38.5
Nonmetropolitan Areas	606	920	-34.1	-49.8	15.4

Source: U. S. Bureau of the Census, Current Population Reports, Series P-23, No. 37, "Social and Economic Characteristics of the Population in Metropolitan and Nonmetropolitan Areas: 1970 and 1960," derived from Tables E and F.

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SOUTHERN REGIONAL RESEARCH IN RURAL SOCIOLOGY SINCE THE MID 1950's*

C. L. Cleland**

The following report is based on the author's memory of events relating to research activities in the South since his arrival at the University of Tennessee in 1958. His memory has been aided by minutes of meetings, correspondence in his files, and selected reports from other rural sociologists in the South. As with any attempt to write history, there will be some omissions of events of personalities that some feel have had a significant part. There may also be some misinterpretations of events and for these the author accepts full responsibility. It is hoped that the report will serve to further the cause of rural sociology in the South.

Limited Personnel

During the early 1950's the number of rural sociologists who were active in research in the region was fairly limited. This was the case at least for those with direct ties to agricultural experiment stations. Harold Kaufman at Mississippi State was one of those most vocal and energetic in attempting to coordinate some of those research activities. His concern was and continues to be community oriented and it was around such an interest that he attempted to rally support. Alvin Bertrand at Louisiana State also had larger than state interests at heart and was very supportive of regional cooperation even though his main commitment was to the teaching program. Selz Mayo at North Carolina State also had some larger than state interests but Glenn McCann of the same institution was the younger man who was willing to do more than attend meetings to make regional research go. The University of Kentucky had some real strength in numbers but ties with the North Central Regional Research group were already strong. Milton Coughenour did see the need for coordination and cooperation in the South and so was willing to invest some time and energy to promoting the cause of coordination. William Folkman in Arkansas had a very real concern with the small farm operators and tenants who were having such a difficult time and he too felt the importance of a concerted effort in research in rural sociology in the South.

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There were a number of agricultural economists in the South who were also sympathetic to the cause of those who were in difficult straits because of the social situation and were willing to join with rural sociologists to try to work out some regional coordination. Ben Lanham who was at Auburn was one of these. At that time Auburn had no rural sociologist on its staff. Florida was similarly situated except Dan Alleger was making the transition from being an agricultural economist.

At the University of Georgia at this time there were a number of rural sociologists on the staff but none had any connection with the agricultural experiment station. John Belcher, for example, had worked with Sewell and Sharp on farm family level of living studies in Oklahoma. In Virginia rural sociology was given some emphasis with Don Fessler in extension work and Leland Tate in teaching but again there was no tie to the agricultural experiment station for research. At the University of Tennessee there were two agricultural economists who were in training to complete their doctorates in rural sociology. Howard Bonser was doing his graduate work at Pennsylvania State and Ben Leubke was doing his work at the University of Florida. They both left the University of Tennessee in 1957 and were replaced by Charles Cleland.

Efforts to Initiate Regional Research

USDA support for regional research in general at this time was fairly substantial by then current standards. There was increasing recognition that many of the problems being studied by the individual state experiment stations did not really observe state boundaries. There was the feeling that a significant increase in efficiency in research efforts could be achieved by encouraging scientists in different states working on related problems to coordinate their efforts. The mechanism set up for this was the regional research project. These projects were funded separately from the usual federal funds for agricultural experiment station work. The regional research funds were allocated to the states as a supplement to the Hatch funds which provided the principal support. In the other regions the funds allocated to a particular regional project were distributed among the states involved in the project according to decisions of the technical committee. This approach encouraged station directors to have some representation in virtually every project in the region. In the southern region the directors decided to allocate the regional research funds to the various experiment stations on a formula basis (don't ask me what the formula was!). This permitted the directors to be selective about which regional projects their states participated in. There was no loss of funds to an individual state because of lack of participation in a particular project.

The problem of how to initiate a regional project had not been satisfactorily resolved. There was the requirement that a project statement be submitted to the regional directors, the Committee of Nine, and to CSRS. This meant that some type of contact had to be made either at professional society meetings or at the researcher's own expense to develop the statement for submission to the various people needing to approve it. The Farm Foundation was assisting the process of getting regional projects formulated by paying the expenses of researchers in various disciplines to regional committees which were appointed by the directors in the region. Knowledge of such support led Kaufman to make contact with Farm Foundation personnel to explore the possibility of such a committee of rural sociologists in the South.

The Farm Foundation director (Joseph Ackerman) was in favor of the appointment of such a committee and indicated that the Foundation would provide support if the directors were interested in having such a committee formed. Eventually the directors agreed to the establishment of a committee whose express purpose was the development of proposals for regional research in rural sociology. This committee was designated as the SP-29 committee which identified it as a committee in preliminary phases of becoming a technical committee for a regional project. The request to the Farm Foundation had been in terms of establishing a Southern Rural Sociology Committee which could have had broader concerns than the one actually established by the southern directors. As a result, when the proposal for a regional project developed by the committee was accepted in 1958, the Farm Foundation group simply went out of existence. The technical committee established to guide the progress of the regional project had representatives from Alabama, Arkansas, Kentucky, Louisiana, Mississippi, North Carolina, and Texas. At later points in time Tennessee, Florida, and Georgia became actively associated with the project.

Dean E. V. Smith was appointed by the southern directors to be the administrative advisor to the technical committee and Paul Jehlik served as the CSRS representative. While Dean Smith had some interest in this area, his technical field was that of animal husbandry. Dean Smith was concerned from the beginning that the rural sociologists should make every effort to impress the southern directors with the results of their research if they were to continue to be funded. He had observed that the meetings of technical committees could become mere social gatherings used to show off the facilities or accomplishments of a given state or individual. Dean Smith was also very strongly oriented toward making the project truly regional in character. The pattern of a "mother hubbard" regional project statement with a number of more or less related independent state projects did not impress him very greatly. With his stimulation and some commitment on the part of the technical committee members, the project soon became one which would permit some generalization to the region, at least to the participating states.

This pattern was soon adopted by CSRS as the standard approach to regional research project statements. Instead of having a very broad regional project statement with individual state projects which could be accepted or refused by the technical committee, the format became a detailed regional project statement with a minimal supplementary indication that a particular state would be involved. The obligations of each of the states was spelled out in the regional project proposal. The proposal made by the SP-29 committee was designated the S-44 project which was a study of the adjustment of families in low income areas. This project was probably the first southern regional project involving research which would yield generalizations to the region from the survey data.

The Southern Regional Rural Sociology Projects

The beginnings of the Adjustment Study designated as the S-44 project have been described above. The project itself was a study of poverty in the South, at a time when political forces were denying that there was any such thing as poverty in the region. The interest of the researchers at this time was principally one of describing the situation of the families living in these low income rural areas. This interest included setting the information collected through a survey in the proper context with respect to data from secondary sources and other local information sources. Some forces in the South had been interested in the poor people but their voices were few in number and their impact was limited. The Adjustment Study researchers were attempting to document living conditions in a way which could not be easily refuted by the politician or other apologists for the region.

Through the encouragement of Dean Smith and the willingness of the participants in the Adjustment Study to limit the exclusive pursuit of their individual interests, the study became truly regional with a systematicly drawn sample and a carefully developed schedule of questions to be used by the interviewers in the various states. The emphasis in the project became more explicitly sociological with a deemphasis on the economics as agricultural economists were replaced on the technical committee by rural sociologists. Even so the data collected included a large measure of economic information which the sociologists had a little difficulty utilizing as effectively as economists might have.

The Adjustment Study did provide for a great deal of interaction among the rural sociologists in the South which engendered a strong feeling of commitment to the region. This was reflected in their willingness to collect some data in which various individuals did not have a strong professional interest and to be responsible for certain types of service or data analysis which did not contribute directly to one's own immediate welfare. There was a complete exchange among the participating states of the survey data collected and a division of responsibility for its analysis.

The functioning of the project as a truly regional effort was recognized in the circle of the directors as well as in other groups due largely to the efforts of Dean Smith and Paul Jehlik. The project did prove to be productive in terms of the number of papers, reports, articles, and bulletins which were produced. The names of the principal researchers involved appears in Appendix 1. This appendix also includes a list of the officers who served in each year of the project's existence, the month and place of each annual meeting and the subcommittees which were active during various phases of the project along with the chairman of such subcommittees.

Transition From Adjustment To Mobility

The S-44 study of adjustment was scheduled to come to a close in mid 1964. The project was granted a one year extension to complete the analysis of the data collected and to publish the results of the study. This time was also used to decide whether to revise the project and get a further extension or to replace it with a new project. During the period approaching the transition, two very active rural sociologists became part of the personnel resources of the South and were very influential in the direction of the regional project work. Bill Kuvlesky moved to Texas A&M from Pennsylvania State and John Kelley moved to the University of Georgia from San Fernando State College in California.

It was about this time that former President Johnson launched his "War on Poverty" and created the Office of Economic Opportunity. Dean Smith felt that such an organization should have the benefit of our research based knowledge and arranged for a seminar of the Adjustment Study personnel and selected other rural social scientists with some of the top people responsible for the OEO programs. This seminar had about 30 participants and the need for the types of information being provided by the regional projects was brought home very sharply. (See Appendix 2 for a list of the participants.)

One of the principal outcomes of the seminar with OEO was the publication of two volumes which attempted to pull together the numerous reports prepared in connection with the Adjustment Study. [1] Virlyn Boyd of Clemson who had not been a participant in the earlier study but who had a real interest in the Mobility Study was able to arrange for some free time to gather and publish an annotated bibliography of the Adjustment Study materials along with a separate volume which was a synthesis of the various reports from the study. The experience of dealing with a governmental bureaucratic office at the Washington level was educational for all of the participants.

The Mobility Study got underway early in 1965 in terms of the plans for data collection and the general ideas about anlaysis even though officially it didn't start until July. The project statement was the result of a number of different interests on the part of rural sociologists who felt that regional research could be worthwhile. In an attempt to incorporate the interests of each of those involved in the deliberations about the project proposal, the final product essentially incorporated three projects under one heading. The first of these was a follow-up of the Adjustment Study families, the second was to involve following the children who had migrated from the Adjustment Study families, and the third one was to concentrate on the aspirations and expectations of high school students both with respect to their education and their future occupations in the areas where the Adjustment Study had been carried out.

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[1] Virlyn A. Boyd and Carolyn A. Morgan, Synthesis of Finding from Southern Regional Cooperative Research Project S-44: Factors in the Adjustment of Families and Individuals in Low-Income Rural Areas of the South, AE 290, South Carolina AES, March 1966; and Carolyn A. Morgan and Virlyn A. Boyd, Annotated Bibliography of Publications and Reports Resulting from Southern Regional Cooperative Research Project S-44: Factors in the Adjustment of Families and Individuals in Low-Income Rural Areas of the South, AE 289, South Carolina AES, March 1966.

The pursuit of the various objectives of the mobility study ultimately depended upon the interest of a given individual or at best a small group of two or three individuals. The interest in pursuing the children of the Adjustment Study families rested principally with C. Horace Hamilton. When Dr. Hamilton experienced some illness and found other areas to be of greater interest, the leadership for this particular part of the project vanished. As a result the technical committee formally dropped that objective about midway in the course of the study.

The productivity in terms of reports, theses, etc., for the Mobility Study came mostly from the group interested in the high school students and most of these were under the direction of Bill Kuvlesky. The follow-up of the Adjustment Study families resulted in very few reports. (See Appendix 3 for a list of the participants and offices held in the technical committee.)

During the course of the mobility study process, there was some concern expressed among the members that there was insufficient time to discuss matters of more general concern to the participants in the project. From 1965 through 1967 the only opportunities for rural sociologists in the South to get together as a regional group occurred through the meetings of the regional project technical committee. The Association of Southern Agricultural Workers did have a section for agriculture economics and rural sociology but it was clearly dominated by the agricultural economists. Normally there was only a half day session devoted to papers by rural sociologists. While this served the interest of interdisciplinary contact, it did not rank high in professional prestige with the result that little attention was given to such meetings.

There was interest in publicizing the results of the regional research and discussion in the technical committee included emphasis on publication in professional journals as well as through the experiment station bulletin series. Both Dean Smith and Paul Jehlik encouraged such wide spread disemination of the results. They were interested both in letting other social scientists know that a significant bit of research was being carried on in the South and in getting the results to the policy makers to facilitate resolution of the problems identified and described. One of the problems identified was the delay in getting articles published in professional journals because of the backlog of manuscripts which had been accepted for publication. This was but part of the wide variety of topics which would come up for discussion in the technical committee meetings and Dean Smith occasionally had to get the group back on the track of concentrating on the commitment made in the project statement.

Given the limited opportunity for exploring other interests in the technical committee meetings, a renewed interest was expressed in establishing a committee supported by the Farm Foundation which could range freely over the types of research interests of rural sociologists. At the same time the agricultural economists in the region were feeling some of the same problems concerning outlets for publication of research reports and were in the process or organizing a Southern Agricultural Economics Association. This group took the place of the agriculture economics part of the joint section with rural sociology in the ASAW. It appeared that the action was going to leave the rural sociologists without a meaningful place in the ASAW.

Dan Alleger was scheduled to become chairman of the joint agricultural economics and rural sociology section when the section was dissolved. With the encouragement of John Dunkelberger, Bill Kuvlesky, and some others the decision was made to at least give a rural sociology section of the ASAW a chance and Alleger was asked to serve as chairman. An appeal was made to the Council of ASAW for recognition of a tentative section in rural sociology. The first meeting of the rural sociology section took place in February of 1969. The meeting was well attended and the decision made that the section should continue. Subsequent meetings have vouched for the vitality of the group involved and it is apparently serving a very real need. (See Appendix 4 for a list of the Rural Sociology Section officers.)

At the same time the tentative organization of the ASAW section was underway, there were contacts made with the Farm Foundation to determine the possible interest in supporting a Southern Rural Sociology Committee. Cleland was asked to make such contacts. The response from Joseph Ackerman of the Farm Foundation indicated their willingness to provide the funds but the actual organization would have to be approved and appointed by the southern experiment station directors. The Farm Foundation's willingness was positively expressed with an indication that funds would be budgeted for a meeting of such a committee and would be available whenever its formation was complete. A meeting was arranged for July 26, 1967 involving Joe Ackerman, Dean Smith, Paul Jehlik, Al Bertrand, Harold Kaufman, and Cleland to discuss the specifics of such an organization. A list of names of those who might be appointed to such a committee was drawn up, a statement of purpose was prepared, and a tentative first meeting date was set up. It was decided at this meeting that the committee would be known as the Southern Rural Sociology Research Committee because the directors of extension in the region were not favorable toward extension participation in such a group at this time. This first meeting of the SRSRC was held in Atlanta on February 15 and 16, 1968.

The SRSRC has continued to be an effective source of ideas about needed research in the region. One of the spin-offs was in the area of demography. When a group of the committee members went to see what resources at Oak Ridge might be used to facilitate their work, the groundwork was laid for the establishment of the Southern Regional Demographic Group which also continues to flourish. Appendix 5 has a list of the officers and committee structure of the SRSRC.

Transition From Mobility To Institutional Impact

The Mobility Study was scheduled to be terminated in the middle of 1971. Again there was a great deal of discussion on what the nature of a revision or replacement project should be. There was a clear recognition that the then current project really was two projects in one and that such a division of interests had interfered with the effective utilization of the time available for the technical committee meetings. The decision was made to replace the single project with two projects. One of those developed was designed to examine the institutional impact on adjustment and to build on the original Adjustment Study. The second project developed dealt with the mobility of the young people who had been interviewed in connection with Mobility Study. Dean Smith indicated that the regional directors would probably approve a second rural sociology research project due to the increase emphasis in USDA on social concerns. He suggested that the two project committees should keep in close touch because of the related nature of their concerns.

During calendar 1970 there had been considerable discussion in the Congress about rural development and other expressions about the lot of people living in rural areas. More than fifty bills dealing with the rural development were introduced into the Congress but there was some uncertainty about the funding of any of those bills. Eventually one was passed but the question of funding was still up in the air until near the end of the year when the budget was finally adopted. Once the budget had been adopted and it became apparent to USDA that some funds for rural development research would be available which had to be spent during the current fiscal year, that is June 30, 1971, the call went out to identify projects which would clearly fall into the definition of rural development. There was a hasty reclassification of a large number of projects but there was also encouragement to submit projects which were soon to be submitted anyway.

Some kind of record for cutting red tape in getting a regional project approved must have been set with the Institutional Impact project proposal. The proposal was sent to Dean Smith on January 11, 1971, with approval for the project by the Southern Regional Research Committee, (for the southern directors), by the Committee of Nine and by CSRS, obtained as of February 1, 1971. Dean Smith of course was largely responsible for getting the approval through in such short order. The fact that the project proposal had been in the discussion stage for nearly two years probably also had something to do with the very ready acceptance of the proposal, that is, the proposal was not something hurriedly whipped up just to take advantage of recently passed appropriations. The first meeting of the technical committee occurred less than two weeks after the proposal had been accepted.

One of the problems in connection with getting the Institutional Impact study underway was that the nine states that were to be involved were also involved in the Mobility Study which had not yet terminated. There was a manpower shortage at the moment. A number of the same people were involved in the SRSRC as well as the rural sociology section of the ASAW with the result that the opportunities for contact were excellent but the efforts to make real progress with the new project cut into the carrying out of some other responsibilities. (See Appendix 6 for a list of the committee personnel and officers.)

The follow up study of Youth Mobility designated as S-81 had a little difficulty getting organized in terms of the specific objectives for the study and the procedures to be followed in achieving them. With

Bill Kuvlesky, John Kelley, and John Dunkelberger, assuming a great deal of the leadership, a proposal was developed which was accepted for approval as of July 1, 1971. The annual meetings for the two technical committees were held in the same hotel at the same time in October of that year.

Conclusion

Regional research in rural sociology has made a great deal of progress in the last decade and a half. The initial push by Harold Kaufman along with some substantial increases in the number of rural sociologists at Experiment Stations in the region and very effective support from Dean Smith have resulted in some very significant achievements. There have been some problems in continuity of personnel directly involved with the regional projects but a small nucleus has provided some stability. The lists of officers and subcommittee chairmen over the years provides some indication of just who these people were. The continuing interest and support of others not directly involved in the projects must also be recognized as important in the effectiveness of these projects. Without the support of department heads, experiment station directors and the USDA (especially CSRS), such achievements would have been extremely difficult. I sincerely hope that the record of these efforts will encourage continued and increased support for such cooperative efforts.

APPENDICES

APPENDIX I

PRINCIPAL PROFESSIONAL PERSONNEL INVOLVED IN THE S-44 ADJUSTMENT STUDY:
(From S-44 Termination Report)

State or Agency	Personnel
Alabama	John E. Dunkelberger
	John M. Huie
	Ben T. Lanham, Jr.
	Harold L. Nix
Arkansas	William S. Folkman
	J. L. Charlton
Florida	Daniel E. Alleger
Georgia	John D. Kelley
Kentucky	J. J. Mangalam
	C. Milton Coughenour
	A. Lee Coleman
	Harry K. Schwarzweller
Louisiana	Lee Taylor
	J. V. D. Sanders
Mississippi	Calvin Vanlandingham
	Benjamin E. Haddox
	Harold F. Kaufman
	John E. Dunkelberger
	Leslie J. Silverman
North Carolina	Glenn C. McCann
	Seung Gyu Moon
	C. Horace Hamilton
Tennessee	Charles L. Cleland
Texas	Bardin H. Nelson
	William P. Kuvlesky
	Sherman K. Fitzgerald
	John R. Christiansen
USDA, ERS	E. Grant Youmans
	Louis J. Ducoff
CSRS Representative	Paul J. Jehlik
Administrative Advisor	Dean E. V. Smith

S-44 COMMITTEE MEETINGS AND ORGANIZATION
(From Annual Reports and Minutes of Meetings)

Year	Month & Place of Meeting	Chairman	Vice-Chairman	Secretary
1959	April, Birmingham	Kaufman	------------	Folkman
1959	October, Memphis	Kaufman	Nelson	McCann
	Subcommittees: Sampling-	Nelson		
	Classification-	McCann		
	Schedule-	Coughenour		
1960	October, Birmingham	Nelson	Kaufman	McCann
	Subcommittees: Basic Coding-	Nelson		
	First Report-	Cleland		
1961	October, Atlanta	Nelson	Cleland	McCann
	Subcommittees: Environmental Data -	Dunkelberger		
	Steering -	Cleland		
1962	October, Atlanta	Cleland	------------	Mangalam
1963	October, Atlanta	Cleland	Taylor	Mangalam
	Subcommittee: Project Revision-	Taylor		
1964	March, Atlanta			
	October, Atlanta	Cleland	Mangalam	Kelley

APPENDIX 2

PARTICIPANTS IN JOINT OEO-CSRS SEMINAR
(From Meeting Minutes Taken by John Kelley)

Participants present:

Alleger, Daniel E., Florida Agricultural Experiment Station, Gainesville
Boyd, Virlyn A., South Carolina AES, Clemson
Bradley, George, Rural Community Development Service, USDA
Byerly, T. C., Administrator, Cooperative State Research Service, USDA
Cleland, Charles L., Tennessee AES, Knoxville
Cravitz, Sanford, Community Action Program, Office of Economic Opportunity
Day, Lee, Economic Research Service, USDA
Drake, Chad, Community Action Program, Office of Economic Opportunity
Dunkelberger, John E., Alabama AES, Auburn
Hausler, Richard, Director, Rural Affairs Task Force, OEO and USDA
Hill, Howard, Economic Research Service, USDA
Hjort, Howard, Staff Economist Group, USDA
Inman, Buis, Economic Research Service, USDA
Jehlik, Paul J., Cooperative State Research Service, USDA
John, M. E., Pennsylvania AES, University Park
Kelley, John D., Georgia AES, Athens
Leighday, Jim, Research Policy Planning and Evaluation, OEO
Leonard, Olen, Economic Research Service, USDA
Mangalam, J. J., Kentucky AES, Lexington
Mayo, Selz C., North Carolina AES, Raleigh
McNamara, Robert L., Missouri AES, Columbia
Moon, Seung Gyu, North Carolina AES, Raleigh
Nelson, Bardin H., Texas AES, College Station
Niederfrank, Evlon J., Federal Extension Service, USDA
Slocum, Walter L., Washington AES, Pullman
Smith, E. V., Dean, Alabama AES, Auburn
Sperry, I. V., University of North Carolina at Greensboro
Sugarman, Jule, Deputy Associate Director, Title II, Community Action Program, Office of Economic Opportunity
Taylor, M. Lee, Louisiana AES, Baton Rouge
Vanlandingham, Calvin L., Mississippi AES, State College
Weidenheimer, Peggy, Statistical Reporting Service, USDA
White, Bennet, Cooperative State Research Service, USDA
Youmans, E. Grant, Kentucky AES, Lexington

APPENDIX 3

PRINCIPAL PROFESSIONAL PERSONNEL INVOLVED IN THE S-61 MOBILITY STUDY:

(From S-61 Termination Report)

State or Agency	Personnel
Alabama	John E. Dunkelberger Calvin L. Vanlandingham
Arkansas	Geraldine B. Terry
Florida	Daniel E. Alleger
Georgia	John D. Kelley Melvin Knapp
Kentucky	J. J. Mangalam A. Lee Coleman
Louisiana	Pedro F. Hernandez George Wilber
Mississippi	Elizabeth J. Stojanovic Calvin L. Vanlandingham Gerald O. Windham Arthur G. Cosby
North Carolina	Glenn C. McCann C. Horace Hamilton
South Carolina	Virlyn A. Boyd
Tennessee	Charles L. Cleland
Texas	William P. Kuvlesky W. Kennedy Upham John T. Pelham
USDA, ERS	E. Grant Youmans James H. Copp Louis J. Ducoff
CSRS Representative	Paul J. Jehlik
Administrative Advisor	Dean E. V. Smith

S-61 COMMITTEE MEETINGS AND ORGANIZATION
(From Annual Reports and Minutes of Meetings)

Year	Month & Place of Meeting		Chairman	Vice-Chairman	Secretary
1965	February, Atlanta				
	October, Atlanta		Cleland	Dunkelberger	Kelley
	Subcommittees:	Restudy -	McCann		
		Youth -	Kuvlesky		
1966	October, Atlanta		Kelley	Cleland	Kuvlesky
	Subcommittees:	Restudy -	Dunkelberger		
		Youth -	Kuvlesky		
1967	October, New Orleans		Dunkelberger	Kelley	Kuvlesky
	Subcommittees:	Restudy -	Cleland		
		Youth -	Kuvlesky		
1968	October, Atlanta		Kuvlesky	Dunkelberger	Boyd
	Subcommittees:	Restudy -	Cleland		
		Youth -	Hernandez		
1969	October, Houston		Kuvlesky	Dunkelberger	Boyd
	Subcommittees:	Restudy -	Cleland		
		Youth -	Kuvlesky		
1970	October, New Orleans		Cleland	Kuvlesky	Dunkelberger

APPENDIX 4

OFFICERS OF THE RURAL SOCIOLOGY SECTION OF THE ASSOCIATION OF SOUTHERN AGRICULTURAL WORKERS

(From the Section *Proceedings*)

Year	Month & Place of Meeting (February)	Chairman	Chairman-Elect	Secretary, Program Chairman	Secretary, Prog. Chmn., Elect
1968-69	Mobile	Alleger	-----------	Kuvlesky	-------
1969-70	Memphis	Alleger	Kuvlesky	Dunkelberger	-------
1970-71	Jacksonville	Kuvlesky	Dunkelberger	Sollie	Voland
1971-72	Richmond	Dunkelberger	Sollie	Voland	Boyd
1972-73	Atlanta	Sollie	Voland	Boyd	Cosby

APPENDIX 5

OFFICERS AND ORGANIZATION OF THE SOUTHERN RURAL SOCIOLOGY RESEARCH COMMITTEE

(From Meeting Minutes and Personnel Notes)

Year	Month & Place of Meeting	Chairman	Vice-Chairman	Secretary
1968	February, Atlanta	Cleland	Tate	Skrabanek
	Subcommittees: Delineation of Development Areas - Bertrand Institutional Structure and Change - Kelley Poverty: Dimensions, Causes and Alleviation of - Sollie Demographic and Migration Patterns - Skrabanek			
1969	February, Atlanta	Cleland	Dunkelberger	Sollie
	Subcommittees: Poverty - Sollie Demographic and Migration Patterns - Skrabanek Development Areas and Institutional Structures - Knapp			
1969	November, Atlanta	Dunkelberger	Sollie	Kelley
1970	June, Knoxville (Officers Continued)			
	Subcommittees: Poverty - Sollie Demographic- Pendleton Education - Kaufman Development- Knapp			
1971	June, Atlanta	Sollie	Kelley	Boyd
1972	-------	Sollie	Kelley	Boyd
	Subcommittee: Factors affecting rural sociology in the South - Kuvlesky			

LIST OF SRSRC STATE REPRESENTATIVES OFR 1968

Alabama	Dr. John Dunkelberger
Arkansas	Dr. J. L. Charlton
Georgia	Dr. John Kelley
Florida	Professor D. E. Alleger
Kentucky	Dr. James S. Brown
Louisiana	Dr. A. L. Bertrand
Mississippi	Dr. Carlton R. Sollie
North Carolina	Dr. Selz Mayo
Oklahoma	None
South Carolina	Mr. V. A. Boyd
Tennessee	Dr. Charles L. Cleland
Texas	Dr. R. L. Skrabanek
Virginia	Dr. Leland B. Tate
At Large	Dr. Harold Kaufman
Representing CSRS	Dr. Paul J. Jehlik
Administrative Advisor	Dean E. V. Smith

APPENDIX 6

PRINCIPAL PROFESSIONAL PERSONNEL INVOLVED IN THE S-79 INSTITUTIONAL IMPACT STUDY

(From various letters and memory)

State or Agency	Personnel
Alabama	Calvin Vanlandingham Wayne Curtis
Georgia	Max Miller James Tarver
Kentucky	A. Lee Coleman C. Milton Coughenour James Brown
Louisiana	Pedro Hernandez Virginia Steelman
Mississippi	Gerald Windham
North Carolina	Glenn C. McCann
South Carolina	Edward McLean
Tennessee	Charles L. Cleland Ying Nan Lin
Texas	W. Kennedy Upham
CSRS Representatives	Kenneth Wilkinson Harold Capener
Administrative Advisors	Dean E. V. Smith Jarvis Miller

S-79 COMMITTEE MEETINGS AND ORGANIZATION
(From Meeting Minutes and Personal Notes)

Year	Month & Place of Meeting	Chairman	Vice-Chairman	Secretary
1971	February, Atlanta	Cleland	McCann	Windham
	Subcommittees: Knowledgeables Survey - Miller Household Interviews - McCann Secondary Data Needs - Vanlandingham			
1971	October, Atlanta	Cleland	McCann	Miller
	Subcommittees: Census Data - Upham Other Secondary Data - Vanlandingham Knowledgeables Interviews - Coleman Household Interviews - McCann			
1972	June, Atlanta	McCann	Coleman	Miller